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<110> Baker, Kevin P.
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Lys Ala Cys Tyr Leu Pro Trp Val Ile Leu Gly Phe Asn Tyr Ile
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Ile Gly Gly Ser Val Ile Asn Glu Leu Ile Gly Asn Leu Val Gly
170 175 180

His Leu Tyr Phe Phe Leu Met Phe Arg Tyr Pro Met Asp Leu Gly
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Gly Arg Asn Phe Leu Ser Thr Pro Gln Phe Leu Tyr Arg Trp Leu
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<213> Homo Sapien

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 <213> Homo Sapien

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 Pro Glu Pro Tyr Tyr Pro Glu Ser Gly Trp Asp Arg Leu Arg Glu
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 Leu Phe Gly Lys Asp Glu Gln Gln Arg Ile Ser Lys Asp Leu Ala
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 Asn Ile Cys Lys Thr Ala Ala Thr Ala Gly Ile Ile Gly Trp Val
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Gln Ser Ala His	Arg Ala Ala Thr Arg	Gly Phe Ile Arg Tyr	Gly
	125	130	135
Trp Arg Trp Gly	Trp Arg Thr Ala Val	Phe Val Thr Ile Phe	Asn
	140	145	150
Thr Val Asn Thr	Ser Leu Asn Val Tyr	Arg Asn Lys Asp Ala	Leu
	155	160	165
Ser His Phe Val	Ile Ala Gly Ala Val	Thr Gly Ser Leu Phe	Arg
	170	175	180
Ile Asn Val Gly	Leu Arg Gly Leu Val	Ala Gly Gly Ile Ile	Gly
	185	190	195
Ala Leu Leu Gly	Thr Pro Val Gly Gly	Leu Leu Met Ala Phe	Gln
	200	205	210
Lys Tyr Ala Gly	Glu Thr Val Gln Glu	Arg Lys Gln Lys Asp	Arg
	215	220	225
Lys Ala Leu His	Glu Leu Lys Leu Glu	Glu Trp Lys Gly Arg	Leu
	230	235	240
Gln Val Thr Glu	His Leu Pro Glu Lys	Ile Glu Ser Ser Leu	Arg
	245	250	255
Glu Asp Glu Pro	Glu Asn Asp Ala Lys	Lys Ile Glu Ala Leu	Leu
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<211> 1487

<212> DNA

<213> Homo Sapien

<400> 5

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Tyr Val Thr Gln Asn Thr Asp Val Tyr Pro Gly Leu Ala Val Phe
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<213> Homo Sapien

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Gln	Gly	Leu	Ser	Val	Ala	Phe	Ile	Leu	Lys	Phe	Leu	Asp	Asn	Met	320	325	330
Phe	His	Val	Leu	Met	Ala	Gln	Val	Thr	Thr	Val	Ile	Ile	Thr	Thr	335	340	345
Val	Ser	Val	Leu	Val	Phe	Asp	Phe	Arg	Pro	Ser	Leu	Glu	Phe	Phe	350	355	360
Leu	Glu	Ala	Pro	Ser	Val	Leu	Leu	Ser	Ile	Phe	Ile	Tyr	Asn	Ala	365	370	375
Ser	Lys	Pro	Gln	Val	Pro	Glu	Tyr	Ala	Pro	Arg	Gln	Glu	Arg	Ile	380	385	390
Arg	Asp	Leu	Ser	Gly	Asn	Leu	Trp	Glu	Arg	Ser	Ser	Gly	Asp	Gly			

395

400

405

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<211> 1173

<212> DNA

<213> Homo Sapien

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<211> 266

<212> PRT

<213> Homo Sapien

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Val	Thr	Leu	His	His	Ile	Asp	Pro	Ala	Leu	Pro	Tyr	Ile	Ser	Asp
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Thr	Gly	Thr	Val	Ala	Pro	Glu	Lys	Cys	Leu	Phe	Gly	Ala	Met	Leu
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Asn	Ile	Ala	Ala	Val	Leu	Cys	Ile	Ala	Thr	Ile	Tyr	Val	Arg	Tyr
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Lys	Gln	Val	His	Ala	Leu	Ser	Pro	Glu	Glu	Asn	Val	Ile	Ile	Lys
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His	Val	Ser	Gly	Ala	Val	Leu	Thr	Phe	Gly	Met	Gly	Ser	Leu	Tyr
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Met	Phe	Val	Gln	Thr	Ile	Leu	Ser	Tyr	Gln	Met	Gln	Pro	Lys	Ile
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His	Gly	Lys	Gln	Val	Phe	Trp	Ile	Arg	Leu	Leu	Leu	Val	Ile	Trp
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Cys	Gly	Val	Ser	Ala	Leu	Ser	Met	Leu	Thr	Cys	Ser	Ser	Val	Leu
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His	Ser	Gly	Asn	Phe	Gly	Thr	Asp	Leu	Glu	Gln	Lys	Leu	His	Trp
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				200					205					210

Ala	Glu	Trp	Ser	Met	Ser	Phe	Ser	Phe	Phe	Gly	Phe	Phe	Leu	Thr
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<212> DNA

<213> Homo Sapien

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<211> 264

<212> PRT

<213> Homo Sapien

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Ser	Asp	Leu	Ala	Glu	Leu	Arg	Glu	Leu	Ser	Glu	Val	Leu	Arg	Glu
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				80					85					90
Leu	Asn	Val	Leu	Ala	Gly	Ala	Leu	Phe	Gly	Pro	Trp	Leu	Gly	Leu
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Leu	Leu	Cys	Cys	Val	Leu	Thr	Ser	Val	Gly	Ala	Thr	Cys	Cys	Tyr
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Leu	Leu	Ser	Ser	Ile	Phe	Gly	Lys	Gln	Leu	Val	Val	Ser	Tyr	Phe
				125					130					135
Pro	Asp	Lys	Val	Ala	Leu	Leu	Gln	Arg	Lys	Val	Glu	Glu	Asn	Arg
				140					145					150
Asn	Ser	Leu	Phe	Phe	Phe	Leu	Leu	Phe	Leu	Arg	Leu	Phe	Pro	Met
				155					160					165
Thr	Pro	Asn	Trp	Phe	Leu	Asn	Leu	Ser	Ala	Pro	Ile	Leu	Asn	Ile
				170					175					180
Pro	Ile	Val	Gln	Phe	Phe	Phe	Ser	Val	Leu	Ile	Gly	Leu	Ile	Pro
				185					190					195
Tyr	Asn	Phe	Ile	Cys	Val	Gln	Thr	Gly	Ser	Ile	Leu	Ser	Thr	Leu
				200					205					210

Thr Ser Leu Asp Ala Leu Phe Ser Trp Asp Thr Val Phe Lys Leu
 215 220 225

Leu Ala Ile Ala Met Val Ala Leu Ile Pro Gly Thr Leu Ile Lys
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Lys Phe Ser Gln Lys His Leu Gln Leu Asn Glu Thr Ser Thr Ala
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Asn His Ile His Ser Arg Lys Asp Thr
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<210> 14

<211> 455

<212> PRT

<213> Homo Sapien

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			20						25				30	
Lys	Asp	Tyr	Glu	Ile	Arg	Gln	Tyr	Val	Val	Gln	Val	Ile	Phe	Ser
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Val	Thr	Phe	Ala	Phe	Ser	Cys	Thr	Met	Phe	Glu	Leu	Ile	Ile	Phe

	50		55		60
Glu Ile Leu Gly Val Leu Asn Ser Ser Ser Arg Tyr Phe His Trp	65		70		75
Lys Met Asn Leu Cys Val Ile Leu Leu Ile Leu Val Phe Met Val	80		85		90
Pro Phe Tyr Ile Gly Tyr Phe Ile Val Ser Asn Ile Arg Leu Leu	95		100		105
His Lys Gln Arg Leu Leu Phe Ser Cys Leu Leu Trp Leu Thr Phe	110		115		120
Met Tyr Phe Phe Trp Lys Leu Gly Asp Pro Phe Pro Ile Leu Ser	125		130		135
Pro Lys His Gly Ile Leu Ser Ile Glu Gln Leu Ile Ser Arg Val	140		145		150
Gly Val Ile Gly Val Thr Leu Met Ala Leu Leu Ser Gly Phe Gly	155		160		165
Ala Val Asn Cys Pro Tyr Thr Tyr Met Ser Tyr Phe Leu Arg Asn	170		175		180
Val Thr Asp Thr Asp Ile Leu Ala Leu Glu Arg Arg Leu Leu Gln	185		190		195
Thr Met Asp Met Ile Ile Ser Lys Lys Lys Arg Met Ala Met Ala	200		205		210
Arg Arg Thr Met Phe Gln Lys Gly Glu Val His Asn Lys Pro Ser	215		220		225
Gly Phe Trp Gly Met Ile Lys Ser Val Thr Thr Ser Ala Ser Gly	230		235		240
Ser Glu Asn Leu Thr Leu Ile Gln Gln Glu Val Asp Ala Leu Glu	245		250		255
Glu Leu Ser Arg Gln Leu Phe Leu Glu Thr Ala Asp Leu Tyr Ala	260		265		270
Thr Lys Glu Arg Ile Glu Tyr Ser Lys Thr Phe Lys Gly Lys Tyr	275		280		285
Phe Asn Phe Leu Gly Tyr Phe Phe Ser Ile Tyr Cys Val Trp Lys	290		295		300
Ile Phe Met Ala Thr Ile Asn Ile Val Phe Asp Arg Val Gly Lys	305		310		315
Thr Asp Pro Val Thr Arg Gly Ile Glu Ile Thr Val Asn Tyr Leu	320		325		330
Gly Ile Gln Phe Asp Val Lys Phe Trp Ser Gln His Ile Ser Phe	335		340		345

Ile Leu Val Gly Ile Ile Ile Val Thr Ser Ile Arg Gly Leu Leu
350 355 360

Ile Thr Leu Thr Lys Phe Phe Tyr Ala Ile Ser Ser Ser Lys Ser
365 370 375

Ser Asn Val Ile Val Leu Leu Leu Ala Gln Ile Met Gly Met Tyr
380 385 390

Phe Val Ser Ser Val Leu Leu Ile Arg Met Ser Met Pro Leu Glu
395 400 405

Tyr Arg Thr Ile Ile Thr Glu Val Leu Gly Glu Leu Gln Phe Asn
410 415 420

Phe Tyr His Arg Trp Phe Asp Val Ile Phe Leu Val Ser Ala Leu
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Ser Ser Ile Leu Phe Leu Tyr Leu Ala His Lys Gln Ala Pro Glu
440 445 450

Lys Gln Met Ala Pro
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<212> DNA
<213> Homo Sapien

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<212> PRT

<213> Homo Sapien

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				20					25					30	
Ala	Thr	Arg	Phe	Asp	Pro	Thr	Trp	Glu	Ser	Leu	Asp	Ala	Arg	Gln	
				35					40					45	
Leu	Pro	Ala	Trp	Phe	Asp	Gln	Ala	Lys	Phe	Gly	Ile	Phe	Ile	His	
				50					55					60	
Trp	Gly	Val	Phe	Ser	Val	Pro	Ser	Phe	Gly	Ser	Glu	Trp	Phe	Trp	
				65					70					75	
Trp	Tyr	Trp	Gln	Lys	Glu	Lys	Ile	Pro	Lys	Tyr	Val	Glu	Phe	Met	
				80					85					90	
Lys	Asp	Asn	Tyr	Pro	Pro	Ser	Phe	Lys	Tyr	Glu	Asp	Phe	Gly	Pro	
				95					100					105	
Leu	Phe	Thr	Ala	Lys	Phe	Phe	Asn	Ala	Asn	Gln	Trp	Ala	Asp	Ile	
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Phe	Gln	Ala	Ser	Gly	Ala	Lys	Tyr	Ile	Val	Leu	Thr	Ser	Lys	His	
				125					130					135	
His	Glu	Gly	Phe	Thr	Leu	Trp	Gly	Ser	Glu	Tyr	Ser	Trp	Asn	Trp	
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Asn	Ala	Ile	Asp	Glu	Gly	Pro	Lys	Arg	Asp	Ile	Val	Lys	Glu	Leu	
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Glu	Val	Ala	Ile	Arg	Asn	Arg	Thr	Asp	Leu	Arg	Phe	Gly	Leu	Tyr	
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Tyr	Ser	Leu	Phe	Glu	Trp	Phe	His	Pro	Leu	Phe	Leu	Glu	Asp	Glu	
				185					190					195	
Ser	Ser	Ser	Phe	His	Lys	Arg	Gln	Phe	Pro	Val	Ser	Lys	Thr	Leu	
				200					205					210	

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Trp	Ser	Asp	Gly	Asp	Gly	Gly	Ala	Pro	Asp	Gln	Tyr	Trp	Asn	Ser	
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Thr	Gly	Phe	Leu	Ala	Trp	Leu	Tyr	Asn	Glu	Ser	Pro	Val	Arg	Gly	
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Thr	Val	Val	Thr	Asn	Asp	Arg	Trp	Gly	Ala	Gly	Ser	Ile	Cys	Lys	
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His	Gly	Gly	Phe	Tyr	Thr	Cys	Ser	Asp	Arg	Tyr	Asn	Pro	Gly	His	
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Leu	Leu	Pro	His	Lys	Trp	Glu	Asn	Cys	Met	Thr	Ile	Asp	Lys	Leu	
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Ile	Glu	Glu	Leu	Val	Lys	Gln	Leu	Val	Glu	Thr	Val	Ser	Cys	Gly	
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				335					340					345	
Ser	Val	Val	Phe	Glu	Glu	Arg	Leu	Arg	Gln	Val	Gly	Ser	Trp	Leu	
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Lys	Val	Asn	Gly	Glu	Ala	Ile	Tyr	Glu	Thr	Tyr	Thr	Trp	Arg	Ser	
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Gln	Asn	Asp	Thr	Val	Thr	Pro	Asp	Val	Trp	Tyr	Thr	Ser	Lys	Pro	
				380					385					390	
Lys	Glu	Lys	Leu	Val	Tyr	Ala	Ile	Phe	Leu	Lys	Trp	Pro	Thr	Ser	
				395					400					405	
Gly	Gln	Leu	Phe	Leu	Gly	His	Pro	Lys	Ala	Ile	Leu	Gly	Ala	Thr	
				410					415					420	
Glu	Val	Lys	Leu	Leu	Gly	His	Gly	Gln	Pro	Leu	Asn	Trp	Ile	Ser	
				425					430					435	
Leu	Glu	Gln	Asn	Gly	Ile	Met	Val	Glu	Leu	Pro	Gln	Leu	Thr	Ile	
				440					445					450	
His	Gln	Met	Pro	Cys	Lys	Trp	Gly	Trp	Ala	Leu	Ala	Leu	Thr	Asn	
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 <211> 1771
 <212> DNA
 <213> Homo Sapien

<400> 17

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His Gly Ile Gly Arg Leu Thr Ala Tyr Glu Phe Ala Lys Leu Lys
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Ser Lys Leu Val Leu Trp Asp Ile Asn Lys His Gly Leu Glu Glu
65 70 75
Thr Ala Ala Lys Cys Lys Gly Leu Gly Ala Lys Val His Thr Phe
80 85 90
Val Val Asp Cys Ser Asn Arg Glu Asp Ile Tyr Ser Ser Ala Lys
95 100 105
Lys Val Lys Ala Glu Ile Gly Asp Val Ser Ile Leu Val Asn Asn
110 115 120
Ala Gly Val Val Tyr Thr Ser Asp Leu Phe Ala Thr Gln Asp Pro
125 130 135
Gln Ile Glu Lys Thr Phe Glu Val Asn Val Leu Ala His Phe Trp
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Thr Thr Lys Ala Phe Leu Pro Ala Met Thr Lys Asn Asn His Gly
155 160 165
His Ile Val Thr Val Ala Ser Ala Ala Gly His Val Ser Val Pro
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Phe Leu Leu Ala Tyr Cys Ser Ser Lys Phe Ala Ala Val Gly Phe
185 190 195

His	Lys	Thr	Leu	Thr	Asp	Glu	Leu	Ala	Ala	Leu	Gln	Ile	Thr	Gly	200	205	210
Val	Lys	Thr	Thr	Cys	Leu	Cys	Pro	Asn	Phe	Val	Asn	Thr	Gly	Phe	215	220	225
Ile	Lys	Asn	Pro	Ser	Thr	Ser	Leu	Gly	Pro	Thr	Leu	Glu	Pro	Glu	230	235	240
Glu	Val	Val	Asn	Arg	Leu	Met	His	Gly	Ile	Leu	Thr	Glu	Gln	Lys	245	250	255
Met	Ile	Phe	Ile	Pro	Ser	Ser	Ile	Ala	Phe	Leu	Thr	Thr	Leu	Glu	260	265	270
Arg	Ile	Leu	Pro	Glu	Arg	Phe	Leu	Ala	Val	Leu	Lys	Arg	Lys	Ile	275	280	285
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<211> 1815

<212> DNA

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 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Gln Arg Pro Cys Tyr Lys Val Ile Tyr Phe His Asp Thr Ser Arg

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Arg	Leu	Asn	Phe	Glu 65	Glu	Ala	Lys	Glu	Ala 70	Cys	Arg	Arg	Asp	Gly 75
Gly	Gln	Leu	Val	Ser 80	Ile	Glu	Ser	Glu	Asp 85	Glu	Gln	Lys	Leu	Ile 90
Glu	Lys	Phe	Ile	Glu 95	Asn	Leu	Leu	Pro	Ser 100	Asp	Gly	Asp	Phe	Trp 105
Ile	Gly	Leu	Arg	Arg 110	Arg	Glu	Glu	Lys	Gln 115	Ser	Asn	Ser	Thr	Ala 120
Cys	Gln	Asp	Leu	Tyr 125	Ala	Trp	Thr	Asp	Gly 130	Ser	Ile	Ser	Gln	Phe 135
Arg	Asn	Trp	Tyr	Val 140	Asp	Glu	Pro	Ser	Cys 145	Gly	Ser	Glu	Val	Cys 150
Val	Val	Met	Tyr	His 155	Gln	Pro	Ser	Ala	Pro 160	Ala	Gly	Ile	Gly	Gly 165
Pro	Tyr	Met	Phe	Gln 170	Trp	Asn	Asp	Asp	Arg 175	Cys	Asn	Met	Lys	Asn 180
Asn	Phe	Ile	Cys	Lys 185	Tyr	Ser	Asp	Glu	Lys 190	Pro	Ala	Val	Pro	Ser 195
Arg	Glu	Ala	Glu	Gly 200	Glu	Glu	Thr	Glu	Leu 205	Thr	Thr	Pro	Val	Leu 210
Pro	Glu	Glu	Thr	Gln 215	Glu	Glu	Asp	Ala	Lys 220	Lys	Thr	Phe	Lys	Glu 225
Ser	Arg	Glu	Ala	Ala 230	Leu	Asn	Leu	Ala	Tyr 235	Ile	Leu	Ile	Pro	Ser 240
Ile	Pro	Leu	Leu	Leu 245	Leu	Leu	Val	Val	Thr 250	Thr	Val	Val	Cys	Trp 255
Val	Trp	Ile	Cys	Arg 260	Lys	Arg	Lys	Arg	Glu 265	Gln	Pro	Asp	Pro	Ser 270
Thr	Lys	Lys	Gln	His 275	Thr	Ile	Trp	Pro	Ser 280	Pro	His	Gln	Gly	Asn 285
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Tyr	Asp	Asn	Met	Ala 335	Val	Asn	Pro	Ser	Glu 340	Ser	Gly	Phe	Val	Thr 345

Leu Val Ser Val Glu Ser Gly Phe Val Thr Asn Asp Ile Tyr Glu
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Glu Asn Glu Ile Tyr Gly Tyr
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<211> 3106

<212> DNA

<213> Homo Sapien

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<222> 1683

<223> unknown base

<400> 21

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 <211> 636
 <212> PRT
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 539
 <223> unknown amino acid

<400> 22
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 Asp Trp Ser Thr Leu Val Pro Leu Arg Leu Arg His Arg Gln Leu
 35 40 45
 Gly Leu Gln Ala Lys Gly Trp Asn Phe Met Leu Glu Asp Ser Thr
 50 55 60
 Phe Trp Ile Phe Gly Gly Ser Ile His Tyr Phe Arg Val Pro Arg
 65 70 75
 Glu Tyr Trp Arg Asp Arg Leu Leu Lys Met Lys Ala Cys Gly Leu
 80 85 90

Asn Thr Leu Thr Thr Tyr Val Pro Trp	Asn Leu His Glu Pro Glu	95	100	105
Arg Gly Lys Phe Asp Phe Ser Gly Asn	Leu Asp Leu Glu Ala Phe	110	115	120
Val Leu Met Ala Ala Glu Ile Gly Leu	Trp Val Ile Leu Arg Pro	125	130	135
Gly Pro Tyr Ile Cys Ser Glu Met Asp	Leu Gly Gly Leu Pro Ser	140	145	150
Trp Leu Leu Gln Asp Pro Gly Met Arg	Leu Arg Thr Thr Tyr Lys	155	160	165
Gly Phe Thr Glu Ala Val Asp Leu Tyr	Phe Asp His Leu Met Ser	170	175	180
Arg Val Val Pro Leu Gln Tyr Lys Arg	Gly Gly Pro Ile Ile Ala	185	190	195
Val Gln Val Glu Asn Glu Tyr Gly Ser	Tyr Asn Lys Asp Pro Ala	200	205	210
Tyr Met Pro Tyr Val Lys Lys Ala Leu	Glu Asp Arg Gly Ile Val	215	220	225
Glu Leu Leu Leu Thr Ser Asp Asn Lys	Asp Gly Leu Ser Lys Gly	230	235	240
Ile Val Gln Gly Val Leu Ala Thr Ile	Asn Leu Gln Ser Thr His	245	250	255
Glu Leu Gln Leu Leu Thr Thr Phe Leu	Phe Asn Val Gln Gly Thr	260	265	270
Gln Pro Lys Met Val Met Glu Tyr Trp	Thr Gly Trp Phe Asp Ser	275	280	285
Trp Gly Gly Pro His Asn Ile Leu Asp	Ser Ser Glu Val Leu Lys	290	295	300
Thr Val Ser Ala Ile Val Asp Ala Gly	Ser Ser Ile Asn Leu Tyr	305	310	315
Met Phe His Gly Gly Thr Asn Phe Gly	Phe Met Asn Gly Ala Met	320	325	330
His Phe His Asp Tyr Lys Ser Asp Val	Thr Ser Tyr Asp Tyr Asp	335	340	345
Ala Val Leu Thr Glu Ala Gly Asp Tyr	Thr Ala Lys Tyr Met Lys	350	355	360
Leu Arg Asp Phe Phe Gly Ser Ile Ser	Gly Ile Pro Leu Pro Pro	365	370	375
Pro Pro Asp Leu Leu Pro Lys Met Pro	Tyr Glu Pro Leu Thr Pro			

	380		385		390
Val Leu Tyr Leu Ser Leu Trp Asp Ala	395	Leu Lys Tyr Leu Gly Glu	400		405
Pro Ile Lys Ser Glu Lys Pro Ile Asn Met Glu Asn Leu Pro Val	410		415		420
Asn Gly Gly Asn Gly Gln Ser Phe Gly Tyr Ile Leu Tyr Glu Thr	425		430		435
Ser Ile Thr Ser Ser Gly Ile Leu Ser Gly His Val His Asp Arg	440		445		450
Gly Gln Val Phe Val Asn Thr Val Ser Ile Gly Phe Leu Asp Tyr	455		460		465
Lys Thr Thr Lys Ile Ala Val Pro Leu Ile Gln Gly Tyr Thr Val	470		475		480
Leu Arg Ile Leu Val Glu Asn Arg Gly Arg Val Asn Tyr Gly Glu	485		490		495
Asn Ile Asp Asp Gln Arg Lys Gly Leu Ile Gly Asn Leu Tyr Leu	500		505		510
Asn Asp Ser Pro Leu Lys Asn Phe Arg Ile Tyr Ser Leu Asp Met	515		520		525
Lys Lys Ser Phe Phe Gln Arg Phe Gly Leu Asp Lys Trp Xaa Ser	530		535		540
Leu Pro Glu Thr Pro Thr Leu Pro Ala Phe Phe Leu Gly Ser Leu	545		550		555
Ser Ile Ser Ser Thr Pro Cys Asp Thr Phe Leu Lys Leu Glu Gly	560		565		570
Trp Glu Lys Gly Val Val Phe Ile Asn Gly Gln Asn Leu Gly Arg	575		580		585
Tyr Trp Asn Ile Gly Pro Gln Lys Thr Leu Tyr Leu Pro Gly Pro	590		595		600
Trp Leu Ser Ser Gly Ile Asn Gln Val Ile Val Phe Glu Glu Thr	605		610		615
Met Ala Gly Pro Ala Leu Gln Phe Thr Glu Thr Pro His Leu Gly	620		625		630
Arg Asn Gln Tyr Ile Lys	635				

<210> 23
 <211> 997
 <212> DNA
 <213> Homo Sapien

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Val Lys Asn Cys Cys Pro Leu Asn Trp Glu Tyr Phe Gln Ser Ser
80 85 90

Cys Tyr Phe Phe Ser Thr Asp Thr Ile Ser Trp Ala Leu Ser Leu
95 100 105

Lys Asn Cys Ser Ala Met Gly Ala His Leu Val Val Ile Asn Ser
110 115 120

Gln Glu Glu Gln Glu Phe Leu Ser Tyr Lys Lys Pro Lys Met Arg
125 130 135

Glu Phe Phe Ile Gly Leu Ser Asp Gln Val Val Glu Gly Gln Trp
140 145 150

Gln Trp Val Asp Gly Thr Pro Leu Thr Lys Ser Leu Ser Phe Trp
155 160 165

Asp Val Gly Glu Pro Asn Asn Ile Ala Thr Leu Glu Asp Cys Ala
170 175 180

Thr Met Arg Asp Ser Ser Asn Pro Arg Gln Asn Trp Asn Asp Val
185 190 195

Thr Cys Phe Leu Asn Tyr Phe Arg Ile Cys Glu Met Val Gly Ile
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Asn Pro Leu Asn Lys Gly Lys Ser Leu
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<210> 25
<211> 2505
<212> DNA
<213> Homo Sapien

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<210> 26
 <211> 654
 <212> PRT
 <213> Homo Sapien

<400> 26
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 35 40 45
 Phe Arg Tyr Val Ser Gly Ser Leu His Tyr Phe Arg Val Pro Arg
 50 55 60
 Val Leu Trp Ala Asp Arg Leu Leu Lys Met Arg Trp Ser Gly Leu
 65 70 75
 Asn Ala Ile Gln Phe Tyr Val Pro Trp Asn Tyr His Glu Pro Gln
 80 85 90
 Pro Gly Val Tyr Asn Phe Asn Gly Ser Arg Asp Leu Ile Ala Phe
 95 100 105
 Leu Asn Glu Ala Ala Leu Ala Asn Leu Leu Val Ile Leu Arg Pro
 110 115 120
 Gly Pro Tyr Ile Cys Ala Glu Trp Glu Met Gly Gly Leu Pro Ser
 125 130 135
 Trp Leu Leu Arg Lys Pro Glu Ile His Leu Arg Thr Ser Asp Pro

140	145	150
Asp Phe Leu Ala	Ala Val Asp Ser Trp	Phe Lys Val Leu Leu Pro
155	160	165
Lys Ile Tyr Pro	Trp Leu Tyr His Asn	Gly Gly Asn Ile Ile Ser
170	175	180
Ile Gln Val Glu	Asn Glu Tyr Gly Ser	Tyr Arg Ala Cys Asp Phe
185	190	195
Ser Tyr Met Arg	His Leu Ala Gly Leu	Phe Arg Ala Leu Leu Gly
200	205	210
Glu Lys Ile Leu	Leu Phe Thr Thr Asp	Gly Pro Glu Gly Leu Lys
215	220	225
Cys Gly Ser Leu	Arg Gly Leu Tyr Thr	Thr Val Asp Phe Gly Pro
230	235	240
Ala Asp Asn Met	Thr Lys Ile Phe Thr	Leu Leu Arg Lys Tyr Glu
245	250	255
Pro His Gly Pro	Leu Val Asn Ser Glu	Tyr Tyr Thr Gly Trp Leu
260	265	270
Asp Tyr Trp Gly	Gln Asn His Ser Thr	Arg Ser Val Ser Ala Val
275	280	285
Thr Lys Gly Leu	Glu Asn Met Leu Lys	Leu Gly Ala Ser Val Asn
290	295	300
Met Tyr Met Phe	His Gly Gly Thr Asn	Phe Gly Tyr Trp Asn Gly
305	310	315
Ala Asp Lys Lys	Gly Arg Phe Leu Pro	Ile Thr Thr Ser Tyr Asp
320	325	330
Tyr Asp Ala Pro	Ile Ser Glu Ala Gly	Asp Pro Thr Pro Lys Leu
335	340	345
Phe Ala Leu Arg	Asp Val Ile Ser Lys	Phe Gln Glu Val Pro Leu
350	355	360
Gly Pro Leu Pro	Pro Pro Ser Pro Lys	Met Met Leu Gly Pro Val
365	370	375
Thr Leu His Leu	Val Gly His Leu Leu	Ala Phe Leu Asp Leu Leu
380	385	390
Cys Pro Arg Gly	Pro Ile His Ser Ile	Leu Pro Met Thr Phe Glu
395	400	405
Ala Val Lys Gln	Asp His Gly Phe Met	Leu Tyr Arg Thr Tyr Met
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Thr His Thr Ile	Phe Glu Pro Thr Pro	Phe Trp Val Pro Asn Asn
425	430	435

Gly Val His Asp Arg Ala Tyr Val Met Val Asp Gly Val Phe Gln
440 445 450

Gly Val Val Glu Arg Asn Met Arg Asp Lys Leu Phe Leu Thr Gly
455 460 465

Lys Leu Gly Ser Lys Leu Asp Ile Leu Val Glu Asn Met Gly Arg
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Leu Ser Phe Gly Ser Asn Ser Ser Asp Phe Lys Gly Leu Leu Lys
485 490 495

Pro Pro Ile Leu Gly Gln Thr Ile Leu Thr Gln Trp Met Met Phe
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Pro Leu Lys Ile Asp Asn Leu Val Lys Trp Trp Phe Pro Leu Gln
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Leu Pro Lys Trp Pro Tyr Pro Gln Ala Pro Ser Gly Pro Thr Phe
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Phe Asn Leu Gly Arg Tyr Trp Thr Lys Gln Gly Pro Gln Gln Thr
575 580 585

Leu Tyr Val Pro Arg Phe Leu Leu Phe Pro Arg Gly Ala Leu Asn
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Lys Ile Thr Leu Leu Glu Leu Glu Asp Val Pro Leu Gln Pro Gln
605 610 615

Val Gln Phe Leu Asp Lys Pro Ile Leu Asn Ser Thr Ser Thr Leu
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His Arg Thr His Ile Asn Ser Leu Ser Ala Asp Thr Leu Ser Ala
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Ser Glu Pro Met Glu Leu Ser Gly His
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<210> 27

<211> 1985

<212> DNA

<213> Homo Sapien

<400> 27

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<210> 28
 <211> 360
 <212> PRT
 <213> Homo Sapien

<400> 28
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 35 40 45
 Gly Val Lys Leu Val Val Glu Thr Pro Glu Glu Thr Leu Phe Thr
 50 55 60
 Tyr Gln Gly Ala Ser Val Ile Leu Pro Cys Arg Tyr Arg Tyr Glu
 65 70 75
 Pro Ala Leu Val Ser Pro Arg Arg Val Arg Val Lys Trp Trp Lys
 80 85 90
 Leu Ser Glu Asn Gly Ala Pro Glu Lys Asp Val Leu Val Ala Ile
 95 100 105
 Gly Leu Arg His Arg Ser Phe Gly Asp Tyr Gln Gly Arg Val His
 110 115 120
 Leu Arg Gln Asp Lys Glu His Asp Val Ser Leu Glu Ile Gln Asp
 125 130 135
 Leu Arg Leu Glu Asp Tyr Gly Arg Tyr Arg Cys Glu Val Ile Asp
 140 145 150
 Gly Leu Glu Asp Glu Ser Gly Leu Val Glu Leu Glu Leu Arg Gly
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 Val Val Phe Pro Tyr Gln Ser Pro Asn Gly Arg Tyr Gln Phe Asn
 170 175 180
 Phe His Glu Gly Gln Gln Val Cys Ala Glu Gln Ala Ala Val Val
 185 190 195

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<210> 30

<211> 280

<212> PRT

<213> Homo Sapien

<400> 30

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				20					25					30	
Val	Arg	Val	Ile	Thr	Asp	Glu	Asn	Trp	Arg	Glu	Leu	Leu	Glu	Gly	
				35					40					45	
Asp	Trp	Met	Ile	Glu	Phe	Tyr	Ala	Pro	Trp	Cys	Pro	Ala	Cys	Gln	
				50					55					60	
Asn	Leu	Gln	Pro	Glu	Trp	Glu	Ser	Phe	Ala	Glu	Trp	Gly	Glu	Asp	
				65					70					75	
Leu	Glu	Val	Asn	Ile	Ala	Lys	Val	Asp	Val	Thr	Glu	Gln	Pro	Gly	
				80					85					90	
Leu	Ser	Gly	Arg	Phe	Ile	Ile	Thr	Ala	Leu	Pro	Thr	Ile	Tyr	His	
				95					100					105	
Cys	Lys	Asp	Gly	Glu	Phe	Arg	Arg	Tyr	Gln	Gly	Pro	Arg	Thr	Lys	
				110					115					120	
Lys	Asp	Phe	Ile	Asn	Phe	Ile	Ser	Asp	Lys	Glu	Trp	Lys	Ser	Ile	
				125					130					135	
Glu	Pro	Val	Ser	Ser	Trp	Phe	Gly	Pro	Gly	Ser	Val	Leu	Met	Ser	
				140					145					150	
Ser	Met	Ser	Ala	Leu	Phe	Gln	Leu	Ser	Met	Trp	Ile	Arg	Thr	Cys	
				155					160					165	
His	Asn	Tyr	Phe	Ile	Glu	Asp	Leu	Gly	Leu	Pro	Val	Trp	Gly	Ser	

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Tyr Thr Val Phe	Ala Leu Ala Thr Leu	Phe Ser Gly Leu Leu	Leu		
	185		190		195
Gly Leu Cys Met	Ile Phe Val Ala Asp	Cys Leu Cys Pro Ser	Lys		
	200		205		210
Arg Arg Arg Pro	Gln Pro Tyr Pro Tyr	Pro Ser Lys Lys Leu	Leu		
	215		220		225
Ser Glu Ser Ala	Gln Pro Leu Lys Lys	Val Glu Glu Glu Gln	Glu		
	230		235		240
Ala Asp Glu Glu	Asp Val Ser Glu Glu	Glu Ala Glu Ser Lys	Glu		
	245		250		255
Gly Thr Asn Lys	Asp Phe Pro Gln Asn	Ala Ile Arg Gln Arg	Ser		
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Leu Gly Pro Ser	Leu Ala Thr Asp Lys	Ser			
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 <211> 1620
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 973, 977, 996, 1003
 <223> unknown base

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<210> 32

<211> 296

<212> PRT

<213> Homo Sapien

<400> 32

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				20					25					30

Leu	Leu	Ser	Ala	Ala	Phe	Leu	Leu	Val	Arg	Lys	Leu	Pro	Pro	Leu
				35					40					45

Cys	His	Gly	Leu	Pro	Thr	Gln	Arg	Glu	Asp	Gly	Asn	Pro	Cys	Asp
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<210> 34
 <211> 440

<212> PRT

<213> Homo Sapien

<400> 34

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Ala	Ala	Ala	Ala	Ala	Pro	Pro	Gly	Leu	Arg	Leu	Leu	Leu	Leu	Leu	
				20					25					30	
Phe	Ser	Ala	Ala	Ala	Leu	Ile	Pro	Thr	Gly	Asp	Gly	Gln	Asn	Leu	
				35					40					45	
Phe	Thr	Lys	Asp	Val	Thr	Val	Ile	Glu	Gly	Glu	Val	Ala	Thr	Ile	
				50					55					60	
Ser	Cys	Gln	Val	Asn	Lys	Ser	Asp	Asp	Ser	Val	Ile	Gln	Leu	Leu	
				65					70					75	
Asn	Pro	Asn	Arg	Gln	Thr	Ile	Tyr	Phe	Arg	Asp	Phe	Arg	Pro	Leu	
				80					85					90	
Lys	Asp	Ser	Arg	Phe	Gln	Leu	Leu	Asn	Phe	Ser	Ser	Ser	Glu	Leu	
				95					100					105	
Lys	Val	Ser	Leu	Thr	Asn	Val	Ser	Ile	Ser	Asp	Glu	Gly	Arg	Tyr	
				110					115					120	
Phe	Cys	Gln	Leu	Tyr	Thr	Asp	Pro	Pro	Gln	Glu	Ser	Tyr	Thr	Thr	
				125					130					135	
Ile	Thr	Val	Leu	Val	Pro	Pro	Arg	Asn	Leu	Met	Ile	Asp	Ile	Gln	
				140					145					150	
Lys	Asp	Thr	Ala	Val	Glu	Gly	Glu	Glu	Ile	Glu	Val	Asn	Cys	Thr	
				155					160					165	
Ala	Met	Ala	Ser	Lys	Pro	Ala	Thr	Thr	Ile	Arg	Trp	Phe	Lys	Gly	
				170					175					180	
Asn	Thr	Glu	Leu	Lys	Gly	Lys	Ser	Glu	Val	Glu	Glu	Trp	Ser	Asp	
				185					190					195	
Met	Tyr	Thr	Val	Thr	Ser	Gln	Leu	Met	Leu	Lys	Val	His	Lys	Glu	
				200					205					210	
Asp	Asp	Gly	Val	Pro	Val	Ile	Cys	Gln	Val	Glu	His	Pro	Ala	Val	
				215					220					225	
Thr	Gly	Asn	Leu	Gln	Thr	Gln	Arg	Tyr	Leu	Glu	Val	Gln	Tyr	Lys	
				230					235					240	
Pro	Gln	Val	His	Ile	Gln	Met	Thr	Tyr	Pro	Leu	Gln	Gly	Leu	Thr	
				245					250					255	
Arg	Glu	Gly	Asp	Ala	Leu	Glu	Leu	Thr	Cys	Glu	Ala	Ile	Gly	Lys	
				260					265					270	

Pro Gln Pro Val Met Val Thr Trp Val Arg Val Asp Asp Glu Met
275 280 285

Pro Gln His Ala Val Leu Ser Gly Pro Asn Leu Phe Ile Asn Asn
290 295 300

Leu Asn Lys Thr Asp Asn Gly Thr Tyr Arg Cys Glu Ala Ser Asn
305 310 315

Ile Val Gly Lys Ala His Ser Asp Tyr Met Leu Tyr Val Tyr Asp
320 325 330

Pro Pro Thr Thr Ile Pro Pro Pro Thr Thr Thr Thr Thr Thr
335 340 345

Thr Thr Thr Thr Thr Thr Ile Leu Thr Ile Ile Thr Asp Ser Arg
350 355 360

Ala Gly Glu Glu Gly Ser Ile Arg Ala Val Asp His Ala Val Ile
365 370 375

Gly Gly Val Val Ala Val Val Val Phe Ala Met Leu Cys Leu Leu
380 385 390

Ile Ile Leu Gly Arg Tyr Phe Ala Arg His Lys Gly Thr Tyr Phe
395 400 405

Thr His Glu Ala Lys Gly Ala Asp Asp Ala Ala Asp Ala Asp Thr
410 415 420

Ala Ile Ile Asn Ala Glu Gly Gly Gln Asn Asn Ser Glu Glu Lys
425 430 435

Lys Glu Tyr Phe Ile
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<210> 35
<211> 2690
<212> DNA
<213> Homo Sapien

<220>
<221> unsure
<222> 2039-2065
<223> unknown base

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 aggctgcag aggccctgaa tgcacaaatg ggaaaccaag gcacagagag 2250
 gctctcctct cctctcctct ccccgatgt accctcaaaa aaaaaaaaaat 2300
 gctaaccagt tcttccatta agcctcggtt gaggtaggga aagcccagca 2350
 ctgctgccct ctgggtaac tcaccctaag gcctcggtcc acctctgggt 2400
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 caccggcaga gtcccagagc cacttcaccc tgggggtggg ctgtggcccc 2500
 cagtcagctc tgetcaggac ctgctctatt tcagggaaga agatttatgt 2550
 attatatgtg gctatatttc ctagagcacc tgtgttttcc tctttctaag 2600
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<210> 36

<211> 364

<212> PRT

<213> Homo Sapien

<400> 36

Met	Ser	Val	Met	Val	Val	Arg	Lys	Lys	Val	Thr	Arg	Lys	Trp	Glu
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Lys	Leu	Pro	Gly	Arg	Asn	Thr	Phe	Cys	Cys	Asp	Gly	Arg	Val	Met
			20						25					30
Met	Ala	Arg	Gln	Lys	Gly	Ile	Phe	Tyr	Leu	Thr	Leu	Phe	Leu	Ile
			35						40					45
Leu	Gly	Thr	Cys	Thr	Leu	Phe	Phe	Ala	Phe	Glu	Cys	Arg	Tyr	Leu
			50						55					60
Ala	Val	Gln	Leu	Ser	Pro	Ala	Ile	Pro	Val	Phe	Ala	Ala	Met	Leu
			65						70					75

Phe	Leu	Phe	Ser	Met	Ala	Thr	Leu	Leu	Arg	Thr	Ser	Phe	Ser	Asp	80	85	90
Pro	Gly	Val	Ile	Pro	Arg	Ala	Leu	Pro	Asp	Glu	Ala	Ala	Phe	Ile	95	100	105
Glu	Met	Glu	Ile	Glu	Ala	Thr	Asn	Gly	Ala	Val	Pro	Gln	Gly	Gln	110	115	120
Arg	Pro	Pro	Pro	Arg	Ile	Lys	Asn	Phe	Gln	Ile	Asn	Asn	Gln	Ile	125	130	135
Val	Lys	Leu	Lys	Tyr	Cys	Tyr	Thr	Cys	Lys	Ile	Phe	Arg	Pro	Pro	140	145	150
Arg	Ala	Ser	His	Cys	Ser	Ile	Cys	Asp	Asn	Cys	Val	Glu	Arg	Phe	155	160	165
Asp	His	His	Cys	Pro	Trp	Val	Gly	Asn	Cys	Val	Gly	Lys	Arg	Asn	170	175	180
Tyr	Arg	Tyr	Phe	Tyr	Leu	Phe	Ile	Leu	Ser	Leu	Ser	Leu	Leu	Thr	185	190	195
Ile	Tyr	Val	Phe	Ala	Phe	Asn	Ile	Val	Tyr	Val	Ala	Leu	Lys	Ser	200	205	210
Leu	Lys	Ile	Gly	Phe	Leu	Glu	Thr	Leu	Lys	Glu	Thr	Pro	Gly	Thr	215	220	225
Val	Leu	Glu	Val	Leu	Ile	Cys	Phe	Phe	Thr	Leu	Trp	Ser	Val	Val	230	235	240
Gly	Leu	Thr	Gly	Phe	His	Thr	Phe	Leu	Val	Ala	Leu	Asn	Gln	Thr	245	250	255
Thr	Asn	Glu	Asp	Ile	Lys	Gly	Ser	Trp	Thr	Gly	Lys	Asn	Arg	Val	260	265	270
Gln	Asn	Pro	Tyr	Ser	His	Gly	Asn	Ile	Val	Lys	Asn	Cys	Cys	Glu	275	280	285
Val	Leu	Cys	Gly	Pro	Leu	Pro	Pro	Ser	Val	Leu	Asp	Arg	Arg	Gly	290	295	300
Ile	Leu	Pro	Leu	Glu	Glu	Ser	Gly	Ser	Arg	Pro	Pro	Ser	Thr	Gln	305	310	315
Glu	Thr	Ser	Ser	Ser	Leu	Leu	Pro	Gln	Ser	Pro	Ala	Pro	Thr	Glu	320	325	330
His	Leu	Asn	Ser	Asn	Glu	Met	Pro	Glu	Asp	Ser	Ser	Thr	Pro	Glu	335	340	345
Glu	Met	Pro	Pro	Pro	Glu	Pro	Pro	Glu	Pro	Pro	Gln	Glu	Ala	Ala	350	355	360
Glu	Ala	Glu	Lys														

<210> 37
 <211> 3231
 <212> DNA
 <213> Homo Sapien

<400> 37
 ggcgagcag ccctagccgc caccgtcgt ctgcagetc tegtgcac 50
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 ccggccggcc atgcagcccc gccgcgcccc ggcccccggg gcgcagctgc 150
 tgcccgcgct ggccctgctg ctgctgctgc tcggagcggg gccccgaggc 200
 agctccctgg ccaaccgggt gcccgccgcg cccttgtctg cgcgcgggccc 250
 gtgcgcgcgc cagccctgcc ggaatggggg tgtgtgcacc tcgcgcctg 300
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 ttgtgccagc aacccttgct accatggcaa ctgcagcagc agcagcagca 450
 gcagcagcga tggctacctc tgcatttgca atgaaggcta tgaaggctcc 500
 aactgtgaac aggcacttcc cagtctcca gccactggct ggaccgaatc 550
 catggcacc cgcagcttc agcctgttcc tgctactcag gagcctgaca 600
 aaatcctgcc tcgctctcag gcaacgggta cactgcctac ctggcagccg 650
 aaaacagggc agaaagtgt agaaatgaaa tgggatcaag tggaggtgat 700
 ccagatatt gcctgtggga atgccagttc taacagctct gcgggtggcc 750
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 ccaacagtgc tccctcatag atggacgaag tgtgaccccc cttcaggctt 900
 cagggggact ggtcctcctg gaggagatgc tcgccttggg gaataatcac 950
 tttattgggt ttgtgaatga ttctgtgact aagtctattg tggctttgcg 1000
 cttaactctg gtggtgaagg tcagcacctg tgtgccgggg gagagtcacg 1050
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 gtattgatgc aaatgaaaag caagatggga gcaatttcac ctgtgtttgc 1250
 cttcctgggt atactggaga gctttgccag tccaagattg attactgcat 1300

cctagaccca tgcagaaatg gagcaacatg catttccagt ctcagtggat 1350
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caaactgtga gatccacctc caatggaagt cccggcacat ggcggagagc 2000
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ccggcatgcc aggtttggaa agaaatcccg gcctgcaatg tatgatgtga 2250
gccccatcgc ctatgaagat tacagtcctg atgacaaacc cttggtcaca 2300
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cagattaatt tctgtggttg ttacagaata agtctaata aggagaagtt 2650
tctgtttgac gtttgagtgc cggctttctg agtagagtta ggaaaaccac 2700
gtaacgtagc atatgatgta taatagagta taccggttac ttaaaaagaa 2750

gtctgaaatg ttcgttttgt ggaaaagaaa ctagttaaat ttactattcc 2800
taaccggaat gaaattagcc tttgccttat tctgtgcatg ggtaagtaac 2850
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gtttttgtca ttttcgtaac agtcgtcgaa ctaggcctca aaaacatacg 2950
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ccaaccatat tgaataaatg tgatcaagtc a 3231

<210> 38

<211> 737

<212> PRT

<213> Homo Sapien

<400> 38

Met	Gln	Pro	Arg	Arg	Ala	Gln	Ala	Pro	Gly	Ala	Gln	Leu	Leu	Pro	1	5	10	15
Ala	Leu	Ala	Leu	Leu	Leu	Leu	Leu	Leu	Gly	Ala	Gly	Pro	Arg	Gly	20	25	30	
Ser	Ser	Leu	Ala	Asn	Pro	Val	Pro	Ala	Ala	Pro	Leu	Ser	Ala	Pro	35	40	45	
Gly	Pro	Cys	Ala	Ala	Gln	Pro	Cys	Arg	Asn	Gly	Gly	Val	Cys	Thr	50	55	60	
Ser	Arg	Pro	Glu	Pro	Asp	Pro	Gln	His	Pro	Ala	Pro	Ala	Gly	Glu	65	70	75	
Pro	Gly	Tyr	Ser	Cys	Thr	Cys	Pro	Ala	Gly	Ile	Ser	Gly	Ala	Asn	80	85	90	
Cys	Gln	Leu	Val	Ala	Asp	Pro	Cys	Ala	Ser	Asn	Pro	Cys	His	His	95	100	105	
Gly	Asn	Cys	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asp	Gly	Tyr	Leu	110	115	120	
Cys	Ile	Cys	Asn	Glu	Gly	Tyr	Glu	Gly	Pro	Asn	Cys	Glu	Gln	Ala	125	130	135	
Leu	Pro	Ser	Leu	Pro	Ala	Thr	Gly	Trp	Thr	Glu	Ser	Met	Ala	Pro	140	145	150	
Arg	Gln	Leu	Gln	Pro	Val	Pro	Ala	Thr	Gln	Glu	Pro	Asp	Lys	Ile	155	160	165	

Leu Pro Arg Ser Gln Ala Thr Val Thr	Leu Pro Thr Trp Gln Pro
170	175 180
Lys Thr Gly Gln Lys Val Val Glu Met	Lys Trp Asp Gln Val Glu
185	190 195
Val Ile Pro Asp Ile Ala Cys Gly Asn	Ala Ser Ser Asn Ser Ser
200	205 210
Ala Gly Gly Arg Leu Val Ser Phe Glu	Val Pro Gln Asn Thr Ser
215	220 225
Val Lys Ile Arg Gln Asp Ala Thr Ala	Ser Leu Ile Leu Leu Trp
230	235 240
Lys Val Thr Ala Thr Gly Phe Gln Gln	Cys Ser Leu Ile Asp Gly
245	250 255
Arg Ser Val Thr Pro Leu Gln Ala Ser	Gly Gly Leu Val Leu Leu
260	265 270
Glu Glu Met Leu Ala Leu Gly Asn Asn	His Phe Ile Gly Phe Val
275	280 285
Asn Asp Ser Val Thr Lys Ser Ile Val	Ala Leu Arg Leu Thr Leu
290	295 300
Val Val Lys Val Ser Thr Cys Val Pro	Gly Glu Ser His Ala Asn
305	310 315
Asp Leu Glu Cys Ser Gly Lys Gly Lys	Cys Thr Thr Lys Pro Ser
320	325 330
Glu Ala Thr Phe Ser Cys Thr Cys Glu	Glu Gln Tyr Val Gly Thr
335	340 345
Phe Cys Glu Glu Tyr Asp Ala Cys Gln	Arg Lys Pro Cys Gln Asn
350	355 360
Asn Ala Ser Cys Ile Asp Ala Asn Glu	Lys Gln Asp Gly Ser Asn
365	370 375
Phe Thr Cys Val Cys Leu Pro Gly Tyr	Thr Gly Glu Leu Cys Gln
380	385 390
Ser Lys Ile Asp Tyr Cys Ile Leu Asp	Pro Cys Arg Asn Gly Ala
395	400 405
Thr Cys Ile Ser Ser Leu Ser Gly Phe	Thr Cys Gln Cys Pro Glu
410	415 420
Gly Tyr Phe Gly Ser Ala Cys Glu Glu	Lys Val Asp Pro Cys Ala
425	430 435
Ser Ser Pro Cys Gln Asn Asn Gly Thr	Cys Tyr Val Asp Gly Val
440	445 450
His Phe Thr Cys Asn Cys Ser Pro Gly	Phe Thr Gly Pro Thr Cys

<210> 39
 <211> 1819
 <212> DNA
 <213> Homo Sapien

<400> 39
 gagccgccgc cgcgcgcgcg ccgcgcactg cagccccagg ccccgcccc 50
 ccaccacagt ctgcgttgct gccccgcctg ggccaggccc caaaggcaag 100
 gacaaagcag ctgtcaggga acctccgcgc gagtcgaatt tacgtgcagc 150
 tgccggcaac cacaggttcc aagatggttt gggggggctt cgcgtgttcc 200
 aagaactgcc tgtgcgcctt caacctgctt tacaccttgg ttagtctgct 250
 gctaattgga attgctgcgt ggggcattgg cttcgggctg atttccagtc 300
 tccgagtggc cggcgtggc attgcagtgg gcattcttct gttcctgatt 350
 gcttttagtg gtctgattgg agctgtaaaa catcatcagg tgttgctatt 400
 tttttatatg attattctgt tacttgattt tattgttcag ttttctgtat 450
 cttgcgcttg tttagccctg aaccaggagc aacagggcca gcttctggag 500
 gttggttggg acaatacggc aagtgtcga aatgacatcc agagaaatct 550
 aaactgctgt gggttccgaa gtgttaaccc aaatgacacc tgtctggcta 600
 gctgtgttaa aagtgaccac tcgtgtctgc catgtgtctc aatcatagga 650
 gaatatgctg gagaggtttt gagatttggt ggtggcattg gcctgttctt 700
 cagttttaca gagatcctgg gtgtttggct gacctacaga tacaggaacc 750
 agaaagaccc ccgcgcgaat cctagtgcac tcctttgatg agaaaacaag 800
 gaagatttcc tttcgtatta tgatcttggt cactttctgt aattttctgt 850
 taagctccat ttgccagttt aaggaaggaa acactatctg gaaaagtacc 900
 ttattgatag tggaattata tatttttact ctatgtttct ctacatgttt 950
 ttttctttcc gttgctgaaa aatatttgaa acttggtggc tctgaagctc 1000
 ggtggcacct ggaatttact gtattcattg tcgggcactg tccactgtgg 1050
 ctttcttag catttttacc tgcagaaaaa ctttgtatgg taccactgtg 1100
 ttggttatat ggtgaatctg aacgtacatc tcaactggat aattatatgt 1150
 agcactgtgc tgtgtagata gttcctactg gaaaaagagt ggaaatttat 1200
 taaaatcaga aagtatgaga tcctgttatg ttaagggaaa tccaaattcc 1250
 caattttttt tggctctttt aggaaagatt gttgtggtaa aaagtgttag 1300

tataaaaaatg ataatttact tgtagtcttt tatgattaca ccaatgtatt 1350
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aggttaagtgc aaaggagaag tggtttcatg aaatgttcta atgtataata 1450
acattttacct tcagcctcca tcagaatgga acgagttttg agtaatcagg 1500
aagtatatct atatgatctt gatattgttt tataataatt tgaagtctaa 1550
aagactgcat ttttaacaa gttagtatta atgcgttggc ccacgtagca 1600
aaaagatatt tgattatctt aaaaattggt aaataccggt ttcatgaaat 1650
ttctcagtat tgtaacagca acttgtcaaa cctaagcata tttgaatatg 1700
atctcccata atttgaaatt gaaatcgtat tgtgtggctc tgtatattct 1750
gttaaaaaat taaaggacag aaacctttct ttgtgtatgc atgtttgaat 1800
taaaagaaag taatggaag 1819

<210> 40

<211> 204

<212> PRT

<213> Homo Sapien

<400> 40

Met	Val	Cys	Gly	Gly	Phe	Ala	Cys	Ser	Lys	Asn	Cys	Leu	Cys	Ala	1	5	10	15
Leu	Asn	Leu	Leu	Tyr	Thr	Leu	Val	Ser	Leu	Leu	Leu	Ile	Gly	Ile	20	25	30	
Ala	Ala	Trp	Gly	Ile	Gly	Phe	Gly	Leu	Ile	Ser	Ser	Leu	Arg	Val	35	40	45	
Val	Gly	Val	Val	Ile	Ala	Val	Gly	Ile	Phe	Leu	Phe	Leu	Ile	Ala	50	55	60	
Leu	Val	Gly	Leu	Ile	Gly	Ala	Val	Lys	His	His	Gln	Val	Leu	Leu	65	70	75	
Phe	Phe	Tyr	Met	Ile	Ile	Leu	Leu	Leu	Val	Phe	Ile	Val	Gln	Phe	80	85	90	
Ser	Val	Ser	Cys	Ala	Cys	Leu	Ala	Leu	Asn	Gln	Glu	Gln	Gln	Gly	95	100	105	
Gln	Leu	Leu	Glu	Val	Gly	Trp	Asn	Asn	Thr	Ala	Ser	Ala	Arg	Asn	110	115	120	
Asp	Ile	Gln	Arg	Asn	Leu	Asn	Cys	Cys	Gly	Phe	Arg	Ser	Val	Asn	125	130	135	
Pro	Asn	Asp	Thr	Cys	Leu	Ala	Ser	Cys	Val	Lys	Ser	Asp	His	Ser	140	145	150	

Cys Ser Pro Cys Ala Pro Ile Ile Gly Glu Tyr Ala Gly Glu Val
155 160 165

Leu Arg Phe Val Gly Gly Ile Gly Leu Phe Phe Ser Phe Thr Glu
170 175 180

Ile Leu Gly Val Trp Leu Thr Tyr Arg Tyr Arg Asn Gln Lys Asp
185 190 195

Pro Arg Ala Asn Pro Ser Ala Phe Leu
200

<210> 41
<211> 2061
<212> DNA
<213> Homo Sapien

<400> 41
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gacgctgcag tgtgaggac ctgtctgcac tgaggagagc agctgccaca 150
cggaggatga cttgactgat gcaagggaag ctggcttcca ggtcaaggcc 200
tacactttca gtgaaccctt ccacctgatt gtgtcctatg actggctgat 250
cctccaaggt ccagccaagc cagtttttga aggggacctg ctggttctgc 300
gctgccaggc ctggcaagac tggccactga ctcagggtgac cttctaccga 350
gatggctcag ctctgggtcc ccccgggcct aacagggaat tctccatcac 400
cgtggtacaa aaggcagaca gcgggcacta ccaactgcagt ggcattcttc 450
agagccctgg tcctgggatc ccagaaacag catctgttgt ggctatcaca 500
gtccaagaac tgtttccagc gccaatctc agagctgtac cctcagctga 550
acccaagca ggaagcccca tgaccctgag ttgtcagaca aagttgcccc 600
tgcagaggtc agctgcccgc ctctcttctt cttctacaa ggatggaagg 650
atagtcaaaa gcagggggct ctctcagaa ttccagatcc ccacagcttc 700
agaagatcac tccgggtcat actggtgtga ggcagccact gaggacaacc 750
aagtttgaa acagagcccc cagctagaga tcagagtga gggtgcttc 800
agctctgctg cacctccac attgaatcca gctcctcaga aatcagctgc 850
tccaggaact gctcctgagg aggccctgg gcctctgcct ccgccgcaa 900
cccatcttc tgaggatcca ggcttttctt ctctctggg gatgccagat 950
cctcatctgt atcaccagat gggccttctt ctcaaacaca tgcaggatgt 1000

Cys	His	Thr	Glu	Asp	Asp	Leu	Thr	Asp	Ala	Arg	Glu	Ala	Gly	Phe
				50					55					60
Gln	Val	Lys	Ala	Tyr	Thr	Phe	Ser	Glu	Pro	Phe	His	Leu	Ile	Val
				65					70					75
Ser	Tyr	Asp	Trp	Leu	Ile	Leu	Gln	Gly	Pro	Ala	Lys	Pro	Val	Phe
				80					85					90
Glu	Gly	Asp	Leu	Leu	Val	Leu	Arg	Cys	Gln	Ala	Trp	Gln	Asp	Trp
				95					100					105
Pro	Leu	Thr	Gln	Val	Thr	Phe	Tyr	Arg	Asp	Gly	Ser	Ala	Leu	Gly
				110					115					120
Pro	Pro	Gly	Pro	Asn	Arg	Glu	Phe	Ser	Ile	Thr	Val	Val	Gln	Lys
				125					130					135
Ala	Asp	Ser	Gly	His	Tyr	His	Cys	Ser	Gly	Ile	Phe	Gln	Ser	Pro
				140					145					150
Gly	Pro	Gly	Ile	Pro	Glu	Thr	Ala	Ser	Val	Val	Ala	Ile	Thr	Val
				155					160					165
Gln	Glu	Leu	Phe	Pro	Ala	Pro	Ile	Leu	Arg	Ala	Val	Pro	Ser	Ala
				170					175					180
Glu	Pro	Gln	Ala	Gly	Ser	Pro	Met	Thr	Leu	Ser	Cys	Gln	Thr	Lys
				185					190					195
Leu	Pro	Leu	Gln	Arg	Ser	Ala	Ala	Arg	Leu	Leu	Phe	Ser	Phe	Tyr
				200					205					210
Lys	Asp	Gly	Arg	Ile	Val	Gln	Ser	Arg	Gly	Leu	Ser	Ser	Glu	Phe
				215					220					225
Gln	Ile	Pro	Thr	Ala	Ser	Glu	Asp	His	Ser	Gly	Ser	Tyr	Trp	Cys
				230					235					240
Glu	Ala	Ala	Thr	Glu	Asp	Asn	Gln	Val	Trp	Lys	Gln	Ser	Pro	Gln
				245					250					255
Leu	Glu	Ile	Arg	Val	Gln	Gly	Ala	Ser	Ser	Ser	Ala	Ala	Pro	Pro
				260					265					270
Thr	Leu	Asn	Pro	Ala	Pro	Gln	Lys	Ser	Ala	Ala	Pro	Gly	Thr	Ala
				275					280					285
Pro	Glu	Glu	Ala	Pro	Gly	Pro	Leu	Pro	Pro	Pro	Pro	Thr	Pro	Ser
				290					295					300
Ser	Glu	Asp	Pro	Gly	Phe	Ser	Ser	Pro	Leu	Gly	Met	Pro	Asp	Pro
				305					310					315
His	Leu	Tyr	His	Gln	Met	Gly	Leu	Leu	Leu	Lys	His	Met	Gln	Asp
				320					325					330
Val	Arg	Val	Leu	Leu	Gly	His	Leu	Leu	Met	Glu	Leu	Arg	Glu	Leu

335

340

345

Ser Gly His Gln Lys Pro Gly Thr Thr Lys Ala Thr Ala Glu
350 355

<210> 43

<211> 2168

<212> DNA

<213> Homo Sapien

<400> 43

gcgagtgtcc agctgcggag acccgtgata attcgttaac taattcaaca 50
aacgggaccc ttctgtgtgc cagaaaccgc aagcagttgc taaccagtg 100
ggacaggcgg attggaagag cgggaaggtc ctggcccaga gcagtgtgac 150
acttccctct gtgaccatga aactctgggt gtctgcattg ctgatggcct 200
ggtttgggtg cctgagctgt gtgcaggccg aattcttcac ctctattggg 250
cacatgactg acctgattta tgcagagaaa gagctggtgc agtctctgaa 300
agagtacatc cttgtggagg aagccaagct ttccaagatt aagagctggg 350
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<212> PRT
<213> Homo Sapien

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35 40 45
Glu Tyr Ile Leu Val Glu Glu Ala Lys Leu Ser Lys Ile Lys Ser
50 55 60

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Ser	Arg	Gly	Glu	Leu 155	Pro	Gly	Thr	Lys	Tyr 160	Gln	Ala	Met	Leu	Ser 165
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Glu	Arg	Ala	Gly	Gly 245	Asn	Leu	Arg	Tyr	Phe 250	Glu	Gln	Leu	Leu	Glu 255
Glu	Glu	Arg	Glu	Lys 260	Thr	Leu	Thr	Asn	Gln 265	Thr	Glu	Ala	Glu	Leu 270
Ala	Thr	Pro	Glu	Gly 275	Ile	Tyr	Glu	Arg	Pro 280	Val	Asp	Tyr	Leu	Pro 285
Glu	Arg	Asp	Val	Tyr 290	Glu	Ser	Leu	Cys	Arg 295	Gly	Glu	Gly	Val	Lys 300
Leu	Thr	Pro	Arg	Arg 305	Gln	Lys	Arg	Leu	Phe 310	Cys	Arg	Tyr	His	His 315
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Asp	Glu	Trp	Asp	Ser 335	Pro	His	Ile	Val	Arg 340	Tyr	Tyr	Asp	Val	Met 345
Ser	Asp	Glu	Glu	Ile	Glu	Arg	Ile	Lys	Glu	Ile	Ala	Lys	Pro	Lys

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<211> 550
<212> PRT
<213> Homo Sapien

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35 40 45
Ala Asp Val Leu Cys Pro Gly Gly Cys Pro Leu Glu Glu Phe Ser
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Val Tyr Gly Asn Ile Val Tyr Ala Ser Val Ser Ser Ile Cys Gly
65 70 75
Ala Ala Val His Arg Gly Val Ile Ser Asn Ser Gly Gly Pro Val
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Arg Val Tyr Ser Leu Pro Gly Arg Glu Asn Tyr Ser Ser Val Asp
95 100 105
Ala Asn Gly Ile Gln Ser Gln Met Leu Ser Arg Trp Ser Ala Ser
110 115 120
Phe Thr Val Thr Lys Gly Lys Ser Ser Thr Gln Glu Ala Thr Gly
125 130 135

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Gly	Ile	Gly	Thr	Glu 200	Gly	Pro	His	Val	Gly 205	Leu	Val	Gln	Ala	Ser 210
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Ser Phe Thr Val Arg Asn Val Phe Gly Pro Ile Arg Glu Ser Pro		
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470	475	480
Asp Val Gln Gly Pro Ala Ala Ala Ala His Asp Ala Gly Ile Thr		
485	490	495
Ile Phe Ser Val Gly Val Ala Trp Ala Pro Leu Asp Asp Leu Lys		
500	505	510
Asp Met Ala Ser Lys Pro Lys Glu Ser His Ala Phe Phe Thr Arg		
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Glu Phe Thr Gly Leu Glu Pro Ile Val Ser Asp Val Ile Arg Gly		
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<210> 47

<211> 1901

<212> DNA

<213> Homo Sapien

<400> 47

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Ala	Ser	Arg	Asn	Ser	Thr	Val	Ser	Arg	Leu	Ile	Phe	Thr	Phe	Phe
				35					40					45
Leu	Phe	Leu	Gly	Val	Leu	Val	Ser	Ile	Ile	Met	Leu	Ser	Pro	Gly
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Val	Glu	Ser	Gln	Leu	Tyr	Lys	Leu	Pro	Trp	Val	Cys	Glu	Glu	Gly
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Ala	Gly	Ile	Pro	Thr	Val	Leu	Gln	Gly	His	Ile	Asp	Cys	Gly	Ser
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Ala	Phe	Phe	Phe	Phe	Phe	Phe	Thr	Leu	Leu	Met	Leu	Cys	Val	Ser
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Ser	Ser	Arg	Asp	Pro	Arg	Ala	Ala	Ile	Gln	Asn	Gly	Phe	Trp	Phe
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Glu	Cys	Asp	Ser	Arg	Ala	Trp	Tyr	Ala	Gly	Leu	Phe	Phe	Phe	Thr
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Ile	Ser	Leu	Asn	Leu	Thr	Phe	Cys	Val	Cys	Val	Ser	Ile	Ala	Ala
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Val	Leu	Pro	Lys	Val	Gln	Asp	Ala	Gln	Pro	Asn	Ser	Gly	Leu	Leu
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Phe Leu Leu Cys Thr Leu Phe Ile Ser	Leu Arg Ser Ser Asp His	
335	340	345
Arg Gln Val Asn Ser Leu Met Gln Thr	Glu Glu Cys Pro Pro Met	
350	355	360
Leu Asp Ala Thr Gln Gln Gln Gln Gln	Gln Val Ala Ala Cys Glu	
365	370	375
Gly Arg Ala Phe Asp Asn Glu Gln Asp	Gly Val Thr Tyr Ser Tyr	
380	385	390
Ser Phe Phe His Phe Cys Leu Val Leu	Ala Ser Leu His Val Met	
395	400	405
Met Thr Leu Thr Asn Trp Tyr Lys Pro	Gly Glu Thr Arg Lys Met	
410	415	420
Ile Ser Thr Trp Thr Ala Val Trp Val	Lys Ile Cys Ala Ser Trp	
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 <212> DNA
 <213> Homo Sapien

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<211> 383

<212> PRT

<213> Homo Sapien

<400> 50

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				20					25					30
Thr	Trp	Pro	Ala	Tyr 35	Arg	Leu	Pro	Val	Val 40	Leu	Pro	Gln	Ser	Thr 45
Leu	Asn	Leu	Ala	Lys 50	Pro	Asp	Phe	Gly	Ala 55	Glu	Ala	Lys	Leu	Glu 60
Val	Ser	Ser	Ser	Cys 65	Gly	Pro	Gln	Cys	His 70	Lys	Gly	Thr	Pro	Leu 75
Pro	Thr	Tyr	Glu	Glu 80	Ala	Lys	Gln	Tyr	Leu 85	Ser	Tyr	Glu	Thr	Leu 90
Tyr	Ala	Asn	Gly	Ser 95	Arg	Thr	Glu	Thr	Gln 100	Val	Gly	Ile	Tyr	Ile 105
Leu	Ser	Ser	Ser	Gly 110	Asp	Gly	Ala	Gln	His 115	Arg	Asp	Ser	Gly	Ser 120
Ser	Gly	Lys	Ser	Arg 125	Arg	Lys	Arg	Gln	Ile 130	Tyr	Gly	Tyr	Asp	Ser 135
Arg	Phe	Ser	Ile	Phe 140	Gly	Lys	Asp	Phe	Leu 145	Leu	Asn	Tyr	Pro	Phe 150
Ser	Thr	Ser	Val	Lys 155	Leu	Ser	Thr	Gly	Cys 160	Thr	Gly	Thr	Leu	Val 165
Ala	Glu	Lys	His	Val 170	Leu	Thr	Ala	Ala	His 175	Cys	Ile	His	Asp	Gly 180
Lys	Thr	Tyr	Val	Lys 185	Gly	Thr	Gln	Lys	Leu 190	Arg	Val	Gly	Phe	Leu 195
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Ser	Ala	Met	Pro	Glu 215	Gln	Met	Lys	Phe	Gln 220	Trp	Ile	Arg	Val	Lys 225
Arg	Thr	His	Val	Pro 230	Lys	Gly	Trp	Ile	Lys 235	Gly	Asn	Ala	Asn	Asp 240
Ile	Gly	Met	Asp	Tyr 245	Asp	Tyr	Ala	Leu	Leu 250	Glu	Leu	Lys	Lys	Pro 255
His	Lys	Arg	Lys	Phe 260	Met	Lys	Ile	Gly	Val 265	Ser	Pro	Pro	Ala	Lys 270
Gln	Leu	Pro	Gly	Gly 275	Arg	Ile	His	Phe	Ser 280	Gly	Tyr	Asp	Asn	Asp 285
Arg	Pro	Gly	Asn	Leu 290	Val	Tyr	Arg	Phe	Cys 295	Asp	Val	Lys	Asp	Glu 300
Thr	Tyr	Asp	Leu	Leu 305	Tyr	Gln	Gln	Cys	Asp 310	Ala	Gln	Pro	Gly	Ala 315

Ser	Gly	Ser	Gly	Val	Tyr	Val	Arg	Met	Trp	Lys	Arg	Gln	Gln	Gln
				320					325					330
Lys	Trp	Glu	Arg	Lys	Ile	Ile	Gly	Ile	Phe	Ser	Gly	His	Gln	Trp
				335					340					345
Val	Asp	Met	Asn	Gly	Ser	Pro	Gln	Asp	Phe	Asn	Val	Ala	Val	Arg
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Ile	Thr	Pro	Leu	Lys	Tyr	Ala	Gln	Ile	Cys	Tyr	Trp	Ile	Lys	Gly
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Ala Ala Arg Leu	Val Leu Pro Leu Gly	Arg Leu Met His Ser Gly			
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Asp Leu Cys Leu	Ser Phe Arg His Lys	Val Thr Gly Leu His Ser			
	455	460		465	
Gly Thr Leu Gln	Val Phe Val Arg Lys	His Gly Ala His Gly Ala			
	470	475		480	
Ala Leu Trp Gly	Arg Asn Gly Gly His	Gly Trp Arg Gln Thr Gln			
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Ile Thr Leu Arg	Gly Ala Asp Ile Lys	Ser Glu Ser Gln Arg			
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 <212> DNA
 <213> Homo Sapien

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<210> 54

<211> 316

<212> PRT

<213> Homo Sapien

<220>

<221> unsure

<222> 233

<223> unknown amino acid

<400> 54

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Val	Gln	Val	Pro	Glu	Asp	Pro	Val	Val	Ala	Leu	Val	Gly	Thr	Asp	35	40	45
Ala	Thr	Leu	Cys	Cys	Ser	Phe	Ser	Pro	Glu	Pro	Gly	Phe	Ser	Leu	50	55	60
Ala	Gln	Leu	Asn	Leu	Ile	Trp	Gln	Leu	Thr	Asp	Thr	Lys	Gln	Leu	65	70	75
Val	His	Ser	Phe	Ala	Glu	Gly	Gln	Asp	Gln	Gly	Ser	Ala	Tyr	Ala	80	85	90
Asn	Arg	Thr	Ala	Leu	Phe	Pro	Asp	Leu	Leu	Ala	Gln	Gly	Asn	Ala	95	100	105
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Thr	Cys	Phe	Val	Ser	Ile	Arg	Asp	Phe	Gly	Ser	Ala	Ala	Val	Ser	125	130	135
Leu	Gln	Val	Ala	Ala	Pro	Tyr	Ser	Lys	Pro	Ser	Met	Thr	Leu	Glu	140	145	150
Pro	Asn	Lys	Asp	Leu	Arg	Pro	Gly	Asp	Thr	Val	Thr	Ile	Thr	Cys	155	160	165
Ser	Ser	Tyr	Gln	Gly	Tyr	Pro	Glu	Ala	Glu	Val	Phe	Trp	Gln	Asp	170	175	180
Gly	Gln	Gly	Val	Pro	Leu	Thr	Gly	Asn	Val	Thr	Thr	Ser	Gln	Met	185	190	195
Ala	Asn	Glu	Gln	Gly	Leu	Phe	Asp	Val	His	Ser	Val	Leu	Arg	Val	200	205	210
Val	Leu	Gly	Ala	Asn	Gly	Thr	Tyr	Ser	Cys	Leu	Val	Arg	Asn	Pro	215	220	225
Val	Leu	Gln	Gln	Asp	Ala	His	Xaa	Ser	Val	Thr	Ile	Thr	Gly	Gln	230	235	240
Pro	Met	Thr	Phe	Pro	Pro	Glu	Ala	Leu	Trp	Val	Thr	Val	Gly	Leu	245	250	255
Ser	Val	Cys	Leu	Ile	Ala	Leu	Leu	Val	Ala	Leu	Ala	Phe	Val	Cys	260	265	270
Trp	Arg	Lys	Ile	Lys	Gln	Ser	Cys	Glu	Glu	Glu	Asn	Ala	Gly	Ala	275	280	285
Glu	Asp	Gln	Asp	Gly	Glu	Gly	Glu	Gly	Ser	Lys	Thr	Ala	Leu	Gln	290	295	300
Pro	Leu	Lys	His	Ser	Asp	Ser	Lys	Glu	Asp	Asp	Gly	Gln	Glu	Ile			

Ala

<210> 55

<211> 1892

<212> DNA

<213> Homo Sapien

<400> 55

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 tagaagccat tttttattaa ataaaatgct tatttttagga aa 1892

<210> 56

<211> 566

<212> PRT

<213> Homo Sapien

<400> 56

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				20					25					30
Cys	Ala	Cys	Lys	Ile	Leu	Gln	Ala	Leu	Phe	Gln	Cys	Asp	His	Val
				35					40					45
Gln	Tyr	Thr	Leu	Val	Pro	Val	Ser	Gly	Trp	Gln	Glu	Leu	Glu	Thr
				50					55					60
Ala	Phe	Leu	Glu	His	Lys	Glu	Gln	Phe	His	Tyr	Phe	Ile	Leu	Ile
				65					70					75
Asn	Cys	Gly	Ala	Asn	Val	Asp	Leu	Leu	Asp	Ile	Leu	Gln	Pro	Asp
				80					85					90
Glu	Asp	Thr	Ile	Phe	Phe	Val	Cys	Asp	Ser	His	Arg	Pro	Val	Asn
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Val	Val	Asn	Val	Tyr	Asn	Asp	Thr	Gln	Ile	Lys	Leu	Leu	Ile	Lys
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Gln	Asp	Asp	Asp	Leu 125	Glu	Val	Pro	Ala	Tyr 130	Glu	Asp	Ile	Phe	Arg 135
Asp	Glu	Glu	Glu	Asp 140	Glu	Glu	His	Ser	Gly 145	Asn	Asp	Ser	Asp	Gly 150
Ser	Glu	Pro	Ser	Glu 155	Lys	Arg	Thr	Arg	Leu 160	Glu	Glu	Glu	Ile	Val 165
Glu	Gln	Thr	Met	Arg 170	Arg	Arg	Gln	Arg	Arg 175	Glu	Trp	Glu	Ala	Arg 180
Arg	Arg	Asp	Ile	Leu 185	Phe	Asp	Tyr	Glu	Gln 190	Tyr	Glu	Tyr	His	Gly 195
Thr	Ser	Ser	Ala	Met 200	Val	Met	Phe	Glu	Leu 205	Ala	Trp	Met	Leu	Ser 210
Lys	Asp	Leu	Asn	Asp 215	Met	Leu	Trp	Trp	Ala 220	Ile	Val	Gly	Leu	Thr 225
Asp	Gln	Trp	Val	Gln 230	Asp	Lys	Ile	Thr	Gln 235	Met	Lys	Tyr	Val	Thr 240
Asp	Val	Gly	Val	Leu 245	Gln	Arg	His	Val	Ser 250	Arg	His	Asn	His	Arg 255
Asn	Glu	Asp	Glu	Glu 260	Asn	Thr	Leu	Ser	Val 265	Asp	Cys	Thr	Arg	Ile 270
Ser	Phe	Glu	Tyr	Asp 275	Leu	Arg	Leu	Val	Leu 280	Tyr	Gln	His	Trp	Ser 285
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Lys	Leu	Trp	Ser	Val 305	His	Gly	Gln	Lys	Arg 310	Leu	Gln	Glu	Phe	Leu 315
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Val	Val	Phe	Ala	Thr 380	Met	Ser	Leu	Met	Glu 385	Ser	Pro	Glu	Lys	Asp 390
Gly	Ser	Gly	Thr	Asp 395	His	Phe	Ile	Gln	Ala 400	Leu	Asp	Ser	Leu	Ser 405
Arg	Ser	Asn	Leu	Asp	Lys	Leu	Tyr	His	Gly	Leu	Glu	Leu	Ala	Lys

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Met Glu Gly Thr Pro Asp Val Met Leu	Phe Ser Arg Pro Ala Ser	
455	460	465
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Pro Leu Ser Met Glu His Gly Thr Val	Thr Val Val Gly Ile Pro	
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Pro Glu Thr Asp Ser Ser Asp Arg Lys	Asn Phe Phe Gly Arg Ala	
515	520	525
Phe Glu Lys Ala Ala Glu Ser Thr Ser	Ser Arg Met Leu His Asn	
530	535	540
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560	565	

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 <211> 2456
 <212> DNA
 <213> Homo Sapien

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<210> 58
<211> 545
<212> PRT
<213> Homo Sapien

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<400> 58
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                20                25                30
Gly Thr Gly Thr Ser Ser Asn Pro Ser Val Gly Leu Asn Phe Gly
                35                40                45
Asn Leu Gly Ser Thr Ser Thr Pro Ala Thr Thr Ser Ala Pro Ser
                50                55                60
Ser Gly Phe Gly Thr Gly Leu Phe Gly Ser Lys Pro Ala Thr Gly
                65                70                75
Phe Thr Leu Gly Gly Thr Asn Thr Gly Ala Leu His Thr Lys Arg
                80                85                90
Pro Gln Val Val Thr Lys Tyr Gly Thr Leu Gln Gly Lys Gln Met
                95                100               105
His Val Gly Lys Thr Pro Ile Gln Val Phe Leu Gly Val Pro Phe
                110               115               120
Ser Arg Pro Pro Leu Gly Ile Leu Arg Phe Ala Pro Pro Glu Pro
                125               130               135
Pro Glu Pro Trp Lys Gly Ile Arg Asp Ala Thr Thr Tyr Pro Pro
                140               145               150

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440	445	450
Leu Gly Val Asn Asn Leu Glu Phe Asn Trp Leu Leu Pro Tyr Asn		
455	460	465
Ile Thr Lys Glu Gln Val Pro Leu Val Val Glu Glu Tyr Leu Asp		
470	475	480
Asn Val Asn Glu His Asp Trp Lys Met Leu Arg Asn Arg Met Met		
485	490	495
Asp Ile Val Gln Asp Ala Thr Phe Val Tyr Ala Thr Leu Gln Thr		
500	505	510
Ala His Tyr His Arg Glu Thr Pro Met Met Gly Ile Cys Pro Ala		
515	520	525
Gly His Ala Thr Thr Arg Met Lys Ser Thr Cys Ser Trp Ile Leu		
530	535	540
Pro Gln Glu Trp Ala		
545		

<210> 59
 <211> 2331
 <212> DNA
 <213> Homo Sapien

<400> 59
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 2331

<210> 60

<211> 694

<212> PRT

<213> Homo Sapien

<400> 60

Met	Leu	Leu	Leu	Leu	Gly	Leu	Cys	Leu	Gly	Leu	Ser	Leu	Cys	Val
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Gly	Ser	Gln	Glu	Glu	Ala	Gln	Ser	Trp	Gly	His	Ser	Ser	Glu	Gln
			20						25					30

Asp	Gly	Leu	Arg	Val	Pro	Arg	Gln	Val	Arg	Leu	Leu	Gln	Arg	Leu
			35						40					45

Lys	Thr	Lys	Pro	Leu	Met	Thr	Glu	Phe	Ser	Val	Lys	Ser	Thr	Ile
			50						55					60

Ile	Ser	Arg	Tyr	Ala	Phe	Thr	Thr	Val	Ser	Cys	Arg	Met	Leu	Asn
			65						70					75

Arg	Ala	Ser	Glu	Asp	Gln	Asp	Ile	Glu	Phe	Gln	Met	Gln	Ile	Pro
			80						85					90

Ala	Ala	Ala	Phe	Ile	Thr	Asn	Phe	Thr	Met	Leu	Ile	Gly	Asp	Lys
			95						100					105

Val	Tyr	Gln	Gly	Glu	Ile	Thr	Glu	Arg	Glu	Lys	Lys	Ser	Gly	Asp
			110						115					120

Arg	Val	Lys	Glu	Lys	Arg	Asn	Lys	Thr	Thr	Glu	Glu	Asn	Gly	Glu
			125						130					135

Lys	Gly	Thr	Glu	Ile	Phe	Arg	Ala	Ser	Ala	Val	Ile	Pro	Ser	Lys
			140						145					150

Asp	Lys	Ala	Ala	Phe	Phe	Leu	Ser	Tyr	Glu	Glu	Leu	Leu	Gln	Arg
			155						160					165

Arg	Leu	Gly	Lys	Tyr	Glu	His	Ser	Ile	Ser	Val	Arg	Pro	Gln	Gln
			170						175					180

Leu	Ser	Gly	Arg	Leu	Ser	Val	Asp	Val	Asn	Ile	Leu	Glu	Ser	Ala
			185						190					195

Gly	Ile	Ala	Ser	Leu	Glu	Val	Leu	Pro	Leu	His	Asn	Ser	Arg	Gln
			200						205					210

Arg	Gly	Ser	Gly	Arg	Gly	Glu	Asp	Asp	Ser	Gly	Pro	Pro	Pro	Ser
			215						220					225

Thr Val Ile Asn Gln Asn Glu Thr Phe Ala Asn Ile Ile Phe Lys

Phe	Leu	Leu	Met	Cys	Glu	Ile	Arg	Met	Val	Glu	Leu	Thr	Phe	Asp	20	25	30
Arg	Ala	Val	Ala	Ser	Gly	Cys	Gln	Arg	Cys	Cys	Asp	Ser	Glu	Asp	35	40	45
Pro	Leu	Asp	Pro	Ala	His	Val	Ser	Ser	Ala	Ser	Ser	Ser	Gly	Arg	50	55	60
Pro	His	Ala	Leu	Pro	Glu	Ile	Arg	Pro	Tyr	Ile	Asn	Ile	Thr	Ile	65	70	75
Leu	Lys	Gly	Asp	Lys	Gly	Asp	Pro	Gly	Pro	Met	Gly	Leu	Pro	Gly	80	85	90
Tyr	Met	Gly	Arg	Glu	Gly	Pro	Gln	Gly	Glu	Pro	Gly	Pro	Gln	Gly	95	100	105
Ser	Lys	Gly	Asp	Lys	Gly	Glu	Met	Gly	Ser	Pro	Gly	Ala	Pro	Cys	110	115	120
Gln	Lys	Arg	Phe	Phe	Ala	Phe	Ser	Val	Gly	Arg	Lys	Thr	Ala	Leu	125	130	135
His	Ser	Gly	Glu	Asp	Phe	Gln	Thr	Leu	Leu	Phe	Glu	Arg	Val	Phe	140	145	150
Val	Asn	Leu	Asp	Gly	Cys	Phe	Asp	Met	Ala	Thr	Gly	Gln	Phe	Ala	155	160	165
Ala	Pro	Leu	Arg	Gly	Ile	Tyr	Phe	Phe	Ser	Leu	Asn	Val	His	Ser	170	175	180
Trp	Asn	Tyr	Lys	Glu	Thr	Tyr	Val	His	Ile	Met	His	Asn	Gln	Lys	185	190	195
Glu	Ala	Val	Ile	Leu	Tyr	Ala	Gln	Pro	Ser	Glu	Arg	Ser	Ile	Met	200	205	210
Gln	Ser	Gln	Ser	Val	Met	Leu	Asp	Leu	Ala	Tyr	Gly	Asp	Arg	Val	215	220	225
Trp	Val	Arg	Leu	Phe	Lys	Arg	Gln	Arg	Glu	Asn	Ala	Ile	Tyr	Ser	230	235	240
Asn	Asp	Phe	Asp	Thr	Tyr	Ile	Thr	Phe	Ser	Gly	His	Leu	Ile	Lys	245	250	255

Ala Glu Asp Asp

<210> 63

<211> 2412

<212> DNA

<213> Homo Sapien

<400> 63

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 ataagtcttg ttgcaccaga tgcagatgct gttgctgcac agatcctgtc 250
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 tgatattagc actggccatt ggtctgggca tccacttcga ctgctcaggg 350
 aagtacagat gtcgctcatc ctttaagtgt atcgagctga tagctcgatg 400
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 gatccacgag cagatggaga gagacctaaa aacctgaaga ggaaggggac 1500

365	370	375
Gly Gly Ile Ile Ser Pro Ser Met Leu Cys Ala Gly Tyr Leu Thr		
380	385	390
Gly Gly Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val		
395	400	405
Cys Gln Glu Arg Arg Leu Trp Lys Leu Val Gly Ala Thr Ser Phe		
410	415	420
Gly Ile Gly Cys Ala Glu Val Asn Lys Pro Gly Val Tyr Thr Arg		
425	430	435
Val Thr Ser Phe Leu Asp Trp Ile His Glu Gln Met Glu Arg Asp		
440	445	450
Leu Lys Thr		

<210> 65
 <211> 1572
 <212> DNA
 <213> Homo Sapien

<400> 65
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 tcccatgctt ctctgcgcaa tatccattcc atcaaccca cacaactcat 200
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Phe Arg Phe Lys Val Leu Ile Leu Ala Tyr Ala Val Cys Arg Leu
110 115 120

Arg His Trp Trp Ala Ile Ala Leu Thr Thr Ala Val Thr Ser Ala
125 130 135

Phe Leu Leu Ala Lys Val Ile Leu Ser Lys Leu Phe Ser Gln Gly
140 145 150

Ala Phe Gly Tyr Val Leu Pro Ile Ile Ser Phe Ile Leu Ala Trp
155 160 165

Ile Glu Thr Trp Phe Leu Asp Phe Lys Val Leu Pro Gln Glu Ala
170 175 180

Glu Glu Glu Asn Arg Leu Leu Ile Val Gln Asp Ala Ser Glu Arg
185 190 195

Ala Ala Leu Ile Pro Gly Gly Leu Ser Asp Gly Gln Phe Tyr Ser
200 205 210

Pro Pro Glu Ser Glu Ala Gly Ser Glu Glu Ala Glu Glu Lys Gln
215 220 225

Asp Ser Glu Lys Pro Leu Leu Glu Leu
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<210> 67

<211> 2196

<212> DNA

<213> Homo Sapien

<400> 67

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aagatcatta acctgaagct ggagcggttt caagaccgcg tggagttctc 450

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<210> 68

<211> 215

<212> PRT

<213> Homo Sapien

<400> 68

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20 25 30

Glu Val Thr Val Pro Ala Thr Leu Asn Val Leu Asn Gly Ser Asp
35 40 45

Ala Arg Leu Pro Cys Thr Phe Asn Ser Cys Tyr Thr Val Asn His
50 55 60

Lys Gln Phe Ser Leu Asn Trp Thr Tyr Gln Glu Cys Asn Asn Cys
65 70 75

Ser Glu Glu Met Phe Leu Gln Phe Arg Met Lys Ile Ile Asn Leu
80 85 90

Lys Leu Glu Arg Phe Gln Asp Arg Val Glu Phe Ser Gly Asn Pro
95 100 105

Ser Lys Tyr Asp Val Ser Val Met Leu Arg Asn Val Gln Pro Glu
110 115 120

Asp Glu Gly Ile Tyr Asn Cys Tyr Ile Met Asn Pro Pro Asp Arg
125 130 135

His Arg Gly His Gly Lys Ile His Leu Gln Val Leu Met Glu Glu
140 145 150

Pro Pro Glu Arg Asp Ser Thr Val Ala Val Ile Val Gly Ala Ser
155 160 165

Val Gly Gly Phe Leu Ala Val Val Ile Leu Val Leu Met Val Val
170 175 180

Lys Cys Val Arg Arg Lys Lys Glu Gln Lys Leu Ser Thr Asp Asp
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Leu Lys Thr Glu Glu Glu Gly Lys Thr Asp Gly Glu Gly Asn Pro
200 205 210

Asp Asp Gly Ala Lys
215

<210> 69

<211> 3038

<212> DNA

<213> Homo Sapien

<400> 69

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<210> 70
 <211> 500
 <212> PRT
 <213> Homo Sapien

<400> 70
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 Phe Met Ala Arg Ala Ile Pro Ala Met Val Val Pro Asn Ala Thr
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 Leu Leu Glu Lys Leu Leu Glu Lys Tyr Met Asp Glu Asp Gly Glu
 35 40 45

 Trp Trp Ile Ala Lys Gln Arg Gly Lys Arg Ala Ile Thr Asp Asn
 50 55 60

 Asp Met Gln Ser Ile Leu Asp Leu His Asn Lys Leu Arg Ser Gln
 65 70 75

 Val Tyr Pro Thr Ala Ser Asn Met Glu Tyr Met Thr Trp Asp Val
 80 85 90

 Glu Leu Glu Arg Ser Ala Glu Ser Trp Ala Glu Ser Cys Leu Trp
 95 100 105

 Glu His Gly Pro Ala Ser Leu Leu Pro Ser Ile Gly Gln Asn Leu
 110 115 120

 Gly Ala His Trp Gly Arg Tyr Arg Pro Pro Thr Phe His Val Gln
 125 130 135

 Ser Trp Tyr Asp Glu Val Lys Asp Phe Ser Tyr Pro Tyr Glu His
 140 145 150

 Glu Cys Asn Pro Tyr Cys Pro Phe Arg Cys Ser Gly Pro Val Cys
 155 160 165

 Thr His Tyr Thr Gln Val Val Trp Ala Thr Ser Asn Arg Ile Gly
 170 175 180

 Cys Ala Ile Asn Leu Cys His Asn Met Asn Ile Trp Gly Gln Ile
 185 190 195

 Trp Pro Lys Ala Val Tyr Leu Val Cys Asn Tyr Ser Pro Lys Gly
 200 205 210

 Asn Trp Trp Gly His Ala Pro Tyr Lys His Gly Arg Pro Cys Ser
 215 220 225

Ala Cys Pro Pro Ser Phe Gly Gly Gly Cys Arg Glu Asn Leu Cys	230	235	240
Tyr Lys Glu Gly Ser Asp Arg Tyr Tyr Pro Pro Arg Glu Glu Glu	245	250	255
Thr Asn Glu Ile Glu Arg Gln Gln Ser Gln Val His Asp Thr His	260	265	270
Val Arg Thr Arg Ser Asp Asp Ser Ser Arg Asn Glu Val Ile Ser	275	280	285
Ala Gln Gln Met Ser Gln Ile Val Ser Cys Glu Val Arg Leu Arg	290	295	300
Asp Gln Cys Lys Gly Thr Thr Cys Asn Arg Tyr Glu Cys Pro Ala	305	310	315
Gly Cys Leu Asp Ser Lys Ala Lys Val Ile Gly Ser Val His Tyr	320	325	330
Glu Met Gln Ser Ser Ile Cys Arg Ala Ala Ile His Tyr Gly Ile	335	340	345
Ile Asp Asn Asp Gly Gly Trp Val Asp Ile Thr Arg Gln Gly Arg	350	355	360
Lys His Tyr Phe Ile Lys Ser Asn Arg Asn Gly Ile Gln Thr Ile	365	370	375
Gly Lys Tyr Gln Ser Ala Asn Ser Phe Thr Val Ser Lys Val Thr	380	385	390
Val Gln Ala Val Thr Cys Glu Thr Thr Val Glu Gln Leu Cys Pro	395	400	405
Phe His Lys Pro Ala Ser His Cys Pro Arg Val Tyr Cys Pro Arg	410	415	420
Asn Cys Met Gln Ala Asn Pro His Tyr Ala Arg Val Ile Gly Thr	425	430	435
Arg Val Tyr Ser Asp Leu Ser Ser Ile Cys Arg Ala Ala Val His	440	445	450
Ala Gly Val Val Arg Asn His Gly Gly Tyr Val Asp Val Met Pro	455	460	465
Val Asp Lys Arg Lys Thr Tyr Ile Ala Ser Phe Gln Asn Gly Ile	470	475	480
Phe Ser Glu Ser Leu Gln Asn Pro Pro Gly Gly Lys Ala Phe Arg	485	490	495
Val Phe Ala Val Val	500		

<210> 71

<211> 1879
<212> DNA
<213> Homo Sapien

<400> 71

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<210> 72
<211> 518
<212> PRT
<213> Homo Sapien

<400> 72
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20 25 30
Leu Pro Leu Arg Val Ala Ala Ala Thr Asn Arg Val Val Ala Pro
35 40 45
Thr Pro Gly Pro Gly Thr Pro Ala Glu Arg His Ala Asp Gly Leu
50 55 60
Ala Leu Ala Leu Glu Pro Ala Leu Ala Ser Pro Ala Gly Ala Ala
65 70 75
Asn Phe Leu Ala Met Val Asp Asn Leu Gln Gly Asp Ser Gly Arg
80 85 90
Gly Tyr Tyr Leu Glu Met Leu Ile Gly Thr Pro Pro Gln Lys Leu
95 100 105
Gln Ile Leu Val Asp Thr Gly Ser Ser Asn Phe Ala Val Ala Gly
110 115 120
Thr Pro His Ser Tyr Ile Asp Thr Tyr Phe Asp Thr Glu Arg Ser
125 130 135
Ser Thr Tyr Arg Ser Lys Gly Phe Asp Val Thr Val Lys Tyr Thr
140 145 150

Gln Gly Ser Trp Thr Gly Phe Val Gly Glu Asp Leu Val Thr Ile
155 160 165

Pro Lys Gly Phe Asn Thr Ser Phe Leu Val Asn Ile Ala Thr Ile
170 175 180

Phe Glu Ser Glu Asn Phe Phe Leu Pro Gly Ile Lys Trp Asn Gly
185 190 195

Ile Leu Gly Leu Ala Tyr Ala Thr Leu Ala Lys Pro Ser Ser Ser
200 205 210

Leu Glu Thr Phe Phe Asp Ser Leu Val Thr Gln Ala Asn Ile Pro
215 220 225

Asn Val Phe Ser Met Gln Met Cys Gly Ala Gly Leu Pro Val Ala
230 235 240

Gly Ser Gly Thr Asn Gly Gly Ser Leu Val Leu Gly Gly Ile Glu
245 250 255

Pro Ser Leu Tyr Lys Gly Asp Ile Trp Tyr Thr Pro Ile Lys Glu
260 265 270

Glu Trp Tyr Tyr Gln Ile Glu Ile Leu Lys Leu Glu Ile Gly Gly
275 280 285

Gln Ser Leu Asn Leu Asp Cys Arg Glu Tyr Asn Ala Asp Lys Ala
290 295 300

Ile Val Asp Ser Gly Thr Thr Leu Leu Arg Leu Pro Gln Lys Val
305 310 315

Phe Asp Ala Val Val Glu Ala Val Ala Arg Ala Ser Leu Ile Pro
320 325 330

Glu Phe Ser Asp Gly Phe Trp Thr Gly Ser Gln Leu Ala Cys Trp
335 340 345

Thr Asn Ser Glu Thr Pro Trp Ser Tyr Phe Pro Lys Ile Ser Ile
350 355 360

Tyr Leu Arg Asp Glu Asn Ser Ser Arg Ser Phe Arg Ile Thr Ile
365 370 375

Leu Pro Gln Leu Tyr Ile Gln Pro Met Met Gly Ala Gly Leu Asn
380 385 390

Tyr Glu Cys Tyr Arg Phe Gly Ile Ser Pro Ser Thr Asn Ala Leu
395 400 405

Val Ile Gly Ala Thr Val Met Glu Gly Phe Tyr Val Ile Phe Asp
410 415 420

Arg Ala Gln Lys Arg Val Gly Phe Ala Ala Ser Pro Cys Ala Glu
425 430 435

Ile Ala Gly Ala Ala Val Ser Glu Ile Ser Gly Pro Phe Ser Thr

440	445	450
Glu Asp Val Ala Ser Asn Cys Val Pro Ala Gln Ser Leu Ser Glu		
455	460	465
Pro Ile Leu Trp Ile Val Ser Tyr Ala Leu Met Ser Val Cys Gly		
470	475	480
Ala Ile Leu Leu Val Leu Ile Val Leu Leu Leu Leu Pro Phe Arg		
485	490	495
Cys Gln Arg Arg Pro Arg Asp Pro Glu Val Val Asn Asp Glu Ser		
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Ser Leu Val Arg His Arg Trp Lys		
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<210> 73
 <211> 2956
 <212> DNA
 <213> Homo Sapien

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<210> 74

<211> 432

<212> PRT

<213> Homo Sapien

<400> 74

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Gly	Gly	Arg	Trp	Gly	Ala	Arg	Ala	Gln	Glu	Ala	Ala	Ala	Ala	Ala
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Ala	Asp	Gly	Pro	Pro	Ala	Ala	Asp	Gly	Glu	Asp	Gly	Gln	Asp	Pro
				50					55					60
His	Ser	Lys	His	Leu	Tyr	Thr	Ala	Asp	Met	Phe	Thr	His	Gly	Ile
				65					70					75
Gln	Ser	Ala	Ala	His	Phe	Val	Met	Phe	Phe	Ala	Pro	Trp	Cys	Gly
				80					85					90
His	Cys	Gln	Arg	Leu	Gln	Pro	Thr	Trp	Asn	Asp	Leu	Gly	Asp	Lys
				95					100					105
Tyr	Asn	Ser	Met	Glu	Asp	Ala	Lys	Val	Tyr	Val	Ala	Lys	Val	Asp
				110					115					120
Cys	Thr	Ala	His	Ser	Asp	Val	Cys	Ser	Ala	Gln	Gly	Val	Arg	Gly
				125					130					135

Tyr	Pro	Thr	Leu	Lys	Leu	Phe	Lys	Pro	Gly	Gln	Glu	Ala	Val	Lys	
				140					145					150	
Tyr	Gln	Gly	Pro	Arg	Asp	Phe	Gln	Thr	Leu	Glu	Asn	Trp	Met	Leu	
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				170					175					180	
Pro	Pro	Ser	Ala	Pro	Glu	Leu	Lys	Gln	Gly	Leu	Tyr	Glu	Leu	Ser	
				185					190					195	
Ala	Ser	Asn	Phe	Glu	Leu	His	Val	Ala	Gln	Gly	Asp	His	Phe	Ile	
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Lys	Phe	Phe	Ala	Pro	Trp	Cys	Gly	His	Cys	Lys	Ala	Leu	Ala	Pro	
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Thr	Trp	Glu	Gln	Leu	Ala	Leu	Gly	Leu	Glu	His	Ser	Glu	Thr	Val	
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Lys	Ile	Gly	Lys	Val	Asp	Cys	Thr	Gln	His	Tyr	Glu	Leu	Cys	Ser	
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Gly	Asn	Gln	Val	Arg	Gly	Tyr	Pro	Thr	Leu	Leu	Trp	Phe	Arg	Asp	
				260					265					270	
Gly	Lys	Lys	Val	Asp	Gln	Tyr	Lys	Gly	Lys	Arg	Asp	Leu	Glu	Ser	
				275					280					285	
Leu	Arg	Glu	Tyr	Val	Glu	Ser	Gln	Leu	Gln	Arg	Thr	Glu	Thr	Gly	
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Ala	Thr	Glu	Thr	Val	Thr	Pro	Ser	Glu	Ala	Pro	Val	Leu	Ala	Ala	
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Glu	Pro	Glu	Ala	Asp	Lys	Gly	Thr	Val	Leu	Ala	Leu	Thr	Glu	Asn	
				320					325					330	
Asn	Phe	Asp	Asp	Thr	Ile	Ala	Glu	Gly	Ile	Thr	Phe	Ile	Lys	Phe	
				335					340					345	
Tyr	Ala	Pro	Trp	Cys	Gly	His	Cys	Lys	Thr	Leu	Ala	Pro	Thr	Trp	
				350					355					360	
Glu	Glu	Leu	Ser	Lys	Lys	Glu	Phe	Pro	Gly	Leu	Ala	Gly	Val	Lys	
				365					370					375	
Ile	Ala	Glu	Val	Asp	Cys	Thr	Ala	Glu	Arg	Asn	Ile	Cys	Ser	Lys	
				380					385					390	
Tyr	Ser	Val	Arg	Gly	Tyr	Pro	Thr	Leu	Leu	Leu	Phe	Arg	Gly	Gly	
				395					400					405	
Lys	Lys	Val	Ser	Glu	His	Ser	Gly	Gly	Arg	Asp	Leu	Asp	Ser	Leu	
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His	Arg	Phe	Val	Leu	Ser	Gln	Ala	Lys	Asp	Glu	Leu				

<210> 75
 <211> 4640
 <212> DNA
 <213> Homo Sapien

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<210> 76
 <211> 515
 <212> PRT
 <213> Homo Sapien

<400> 76
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 35 40 45
 Trp Gly Gln Ala Leu Glu Glu Glu Glu Gly Ala Leu Leu Ala
 50 55 60
 Gln Ala Gly Glu Lys Leu Glu Pro Ser Thr Thr Ser Thr Ser Gln
 65 70 75
 Pro His Leu Ile Phe Ile Leu Ala Asp Asp Gln Gly Phe Arg Asp
 80 85 90
 Val Gly Tyr His Gly Ser Glu Ile Lys Thr Pro Thr Leu Asp Lys
 95 100 105
 Leu Ala Ala Glu Gly Val Lys Leu Glu Asn Tyr Tyr Val Gln Pro
 110 115 120
 Ile Cys Thr Pro Ser Arg Ser Gln Phe Ile Thr Gly Lys Tyr Gln
 125 130 135
 Ile His Thr Gly Leu Gln His Ser Ile Ile Arg Pro Thr Gln Pro
 140 145 150
 Asn Cys Leu Pro Leu Asp Asn Ala Thr Leu Pro Gln Lys Leu Lys
 155 160 165

Glu Val Gly Tyr Ser Thr His Met Val Gly Lys Trp His Leu Gly	170	175	180
Phe Asn Arg Lys Glu Cys Met Pro Thr Arg Arg Gly Phe Asp Thr	185	190	195
Phe Phe Gly Ser Leu Leu Gly Ser Gly Asp Tyr Tyr Thr His Tyr	200	205	210
Lys Cys Asp Ser Pro Gly Met Cys Gly Tyr Asp Leu Tyr Glu Asn	215	220	225
Asp Asn Ala Ala Trp Asp Tyr Asp Asn Gly Ile Tyr Ser Thr Gln	230	235	240
Met Tyr Thr Gln Arg Val Gln Gln Ile Leu Ala Ser His Asn Pro	245	250	255
Thr Lys Pro Ile Phe Leu Tyr Thr Ala Tyr Gln Ala Val His Ser	260	265	270
Pro Leu Gln Ala Pro Gly Arg Tyr Phe Glu His Tyr Arg Ser Ile	275	280	285
Ile Asn Ile Asn Arg Arg Arg Tyr Ala Ala Met Leu Ser Cys Leu	290	295	300
Asp Glu Ala Ile Asn Asn Val Thr Leu Ala Leu Lys Thr Tyr Gly	305	310	315
Phe Tyr Asn Asn Ser Ile Ile Ile Tyr Ser Ser Asp Asn Gly Gly	320	325	330
Gln Pro Thr Ala Gly Gly Ser Asn Trp Pro Leu Arg Gly Ser Lys	335	340	345
Gly Thr Tyr Trp Glu Gly Gly Ile Arg Ala Val Gly Phe Val His	350	355	360
Ser Pro Leu Leu Lys Asn Lys Gly Thr Val Cys Lys Glu Leu Val	365	370	375
His Ile Thr Asp Trp Tyr Pro Thr Leu Ile Ser Leu Ala Glu Gly	380	385	390
Gln Ile Asp Glu Asp Ile Gln Leu Asp Gly Tyr Asp Ile Trp Glu	395	400	405
Thr Ile Ser Glu Gly Leu Arg Ser Pro Arg Val Asp Ile Leu His	410	415	420
Asn Ile Asp Pro Tyr Thr Pro Arg Gln Lys Met Ala Pro Gly Gln	425	430	435
Gln Ala Met Gly Ser Gly Thr Leu Gln Ser Ser Gln Pro Ser Glu	440	445	450
Cys Ser Thr Gly Asn Cys Leu Gln Glu Ile Leu Ala Thr Ala Thr			

	455		460		465
Gly Ser Pro Leu Ser Leu Ser Ala Thr Trp Asp Arg Thr Gly Gly					
	470		475		480
Thr Met Asn Gly Ser Pro Cys Gln Leu Ala Lys Val Tyr Gly Phe					
	485		490		495
Ser Thr Ser Gln Pro Thr His Met Arg Gly Trp Thr Tyr Leu Thr					
	500		505		510
Gly Ile Gln Glu Ser					
	515				

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 <211> 3313
 <212> DNA
 <213> Homo Sapien

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<210> 78

<211> 916

<212> PRT

<213> Homo Sapien

<400> 78

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			20						25					30
Ile	Arg	Tyr	Ser	Val	Pro	Glu	Glu	Leu	Glu	Lys	Gly	Ser	Arg	Val
				35					40					45
Gly	Asp	Ile	Ser	Arg	Asp	Leu	Gly	Leu	Glu	Pro	Arg	Glu	Leu	Ala
				50					55					60
Glu	Arg	Gly	Val	Arg	Ile	Ile	Pro	Arg	Gly	Arg	Thr	Gln	Leu	Phe
				65					70					75

Ala	Leu	Asn	Pro	Arg	Ser	Gly	Ser	Leu	Val	Thr	Ala	Gly	Arg	Ile	80	85	90
Asp	Arg	Glu	Glu	Leu	Cys	Met	Gly	Ala	Ile	Lys	Cys	Gln	Leu	Asn	95	100	105
Leu	Asp	Ile	Leu	Met	Glu	Asp	Lys	Val	Lys	Ile	Tyr	Gly	Val	Glu	110	115	120
Val	Glu	Val	Arg	Asp	Ile	Asn	Asp	Asn	Ala	Pro	Tyr	Phe	Arg	Glu	125	130	135
Ser	Glu	Leu	Glu	Ile	Lys	Ile	Ser	Glu	Asn	Ala	Ala	Thr	Glu	Met	140	145	150
Arg	Phe	Pro	Leu	Pro	His	Ala	Trp	Asp	Pro	Asp	Ile	Gly	Lys	Asn	155	160	165
Ser	Leu	Gln	Ser	Tyr	Glu	Leu	Ser	Pro	Asn	Thr	His	Phe	Ser	Leu	170	175	180
Ile	Val	Gln	Asn	Gly	Ala	Asp	Gly	Ser	Lys	Tyr	Pro	Glu	Leu	Val	185	190	195
Leu	Lys	Arg	Ala	Leu	Asp	Arg	Glu	Glu	Lys	Ala	Ala	His	His	Leu	200	205	210
Val	Leu	Thr	Ala	Ser	Asp	Gly	Gly	Asp	Pro	Val	Arg	Thr	Gly	Thr	215	220	225
Ala	Arg	Ile	Arg	Val	Met	Val	Leu	Asp	Ala	Asn	Asp	Asn	Ala	Pro	230	235	240
Ala	Phe	Ala	Gln	Pro	Glu	Tyr	Arg	Ala	Ser	Val	Pro	Glu	Asn	Leu	245	250	255
Ala	Leu	Gly	Thr	Gln	Leu	Leu	Val	Val	Asn	Ala	Thr	Asp	Pro	Asp	260	265	270
Glu	Gly	Val	Asn	Ala	Glu	Val	Arg	Tyr	Ser	Phe	Arg	Tyr	Val	Asp	275	280	285
Asp	Lys	Ala	Ala	Gln	Val	Phe	Lys	Leu	Asp	Cys	Asn	Ser	Gly	Thr	290	295	300
Ile	Ser	Thr	Ile	Gly	Glu	Leu	Asp	His	Glu	Glu	Ser	Gly	Phe	Tyr	305	310	315
Gln	Met	Glu	Val	Gln	Ala	Met	Asp	Asn	Ala	Gly	Tyr	Ser	Ala	Arg	320	325	330
Ala	Lys	Val	Leu	Ile	Thr	Val	Leu	Asp	Val	Asn	Asp	Asn	Ala	Pro	335	340	345
Glu	Val	Val	Leu	Thr	Ser	Leu	Ala	Ser	Ser	Val	Pro	Glu	Asn	Ser	350	355	360
Pro	Arg	Gly	Thr	Leu	Ile	Ala	Leu	Leu	Asn	Val	Asn	Asp	Gln	Asp			

Thr	Val	Ala	Val	Ala	Asp	Ser	Ile	Pro	Gln	Val	Leu	Ala	Asp	Leu	
				665					670					675	
Gly	Ser	Leu	Glu	Ser	Pro	Ala	Asn	Ser	Glu	Thr	Ser	Asp	Leu	Thr	
				680					685					690	
Leu	Tyr	Leu	Val	Val	Ala	Val	Ala	Ala	Val	Ser	Cys	Val	Phe	Leu	
				695					700					705	
Ala	Phe	Val	Ile	Leu	Leu	Leu	Ala	Leu	Arg	Leu	Arg	Arg	Trp	His	
				710					715					720	
Lys	Ser	Arg	Leu	Leu	Gln	Ala	Ser	Gly	Gly	Gly	Leu	Thr	Gly	Ala	
				725					730					735	
Pro	Ala	Ser	His	Phe	Val	Gly	Val	Asp	Gly	Val	Gln	Ala	Phe	Leu	
				740					745					750	
Gln	Thr	Tyr	Ser	His	Glu	Val	Ser	Leu	Thr	Thr	Asp	Ser	Arg	Lys	
				755					760					765	
Ser	His	Leu	Ile	Phe	Pro	Gln	Pro	Asn	Tyr	Ala	Asp	Met	Leu	Val	
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Ser	Gln	Glu	Ser	Phe	Glu	Lys	Ser	Glu	Pro	Leu	Leu	Leu	Ser	Gly	
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Asp	Ser	Val	Phe	Ser	Lys	Asp	Ser	His	Gly	Leu	Ile	Glu	Val	Ser	
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Leu	Tyr	Gln	Ile	Phe	Phe	Leu	Phe	Phe	Phe	Asn	Cys	Ser	Val	Ser	
				815					820					825	
Gln	Ala	Gly	Val	Gln	Arg	Tyr	Asp	His	Ser	Ser	Leu	Arg	Pro	Gln	
				830					835					840	
Thr	Pro	Arg	Leu	Lys	Gln	Leu	Ser	His	Leu	Cys	Leu	Arg	Cys	Asn	
				845					850					855	
Arg	Asp	Tyr	Arg	Cys	Lys	Pro	Pro	Thr	Val	Cys	Leu	Ser	Ile	Tyr	
				860					865					870	
Leu	Ser	Ile	Tyr	Leu	Ser	Ile	Tyr	Leu	Ser	Ile	Tyr	Leu	Leu	Leu	
				875					880					885	
Ser	Cys	Thr	Asp	Gly	Ser	Leu	Thr	Pro	Val	Ile	Pro	Val	Leu	Trp	
				890					895					900	
Glu	Ala	Glu	Ala	Gly	Gly	Ser	Pro	Glu	Val	Gly	Ser	Leu	Arg	Pro	
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<210> 79
 <211> 2049
 <212> DNA
 <213> Homo Sapien

<400> 79

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<210> 80
<211> 351
<212> PRT
<213> Homo Sapien

<400> 80
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35 40 45
Leu Lys Gly Leu Ile Gln Arg Gln Val Gln Met Cys Lys Arg Asn
50 55 60
Leu Glu Val Met Asp Ser Val Arg Arg Gly Ala Gln Leu Ala Ile
65 70 75
Glu Glu Cys Gln Tyr Gln Phe Arg Asn Arg Arg Trp Asn Cys Ser
80 85 90
Thr Leu Asp Ser Leu Pro Val Phe Gly Lys Val Val Thr Gln Gly
95 100 105
Thr Arg Glu Ala Ala Phe Val Tyr Ala Ile Ser Ser Ala Gly Val
110 115 120
Ala Phe Ala Val Thr Arg Ala Cys Ser Ser Gly Glu Leu Glu Lys
125 130 135
Cys Gly Cys Asp Arg Thr Val His Gly Val Ser Pro Gln Gly Phe

140	145	150
Gln Trp Ser Gly Cys Ser Asp Asn Ile	Ala Tyr Gly Val Ala Phe	
155	160	165
Ser Gln Ser Phe Val Asp Val Arg Glu	Arg Ser Lys Gly Ala Ser	
170	175	180
Ser Ser Arg Ala Leu Met Asn Leu His	Asn Asn Glu Ala Gly Arg	
185	190	195
Lys Ala Ile Leu Thr His Met Arg Val	Glu Cys Lys Cys His Gly	
200	205	210
Val Ser Gly Ser Cys Glu Val Lys Thr	Cys Trp Arg Ala Val Pro	
215	220	225
Pro Phe Arg Gln Val Gly His Ala Leu	Lys Glu Lys Phe Asp Gly	
230	235	240
Ala Thr Glu Val Glu Pro Arg Arg Val	Gly Ser Ser Arg Ala Leu	
245	250	255
Val Pro Arg Asn Ala Gln Phe Lys Pro	His Thr Asp Glu Asp Leu	
260	265	270
Val Tyr Leu Glu Pro Ser Pro Asp Phe	Cys Glu Gln Asp Met Arg	
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Ser Gly Val Leu Gly Thr Arg Gly Arg	Thr Cys Asn Lys Thr Ser	
290	295	300
Lys Ala Ile Asp Gly Cys Glu Leu Leu	Cys Cys Gly Arg Gly Phe	
305	310	315
His Thr Ala Gln Val Glu Leu Ala Glu	Arg Cys Ser Cys Lys Phe	
320	325	330
His Trp Cys Cys Phe Val Lys Cys Arg	Gln Cys Gln Arg Leu Val	
335	340	345
Glu Leu His Thr Cys Arg		
350		

<210> 81

<211> 3150

<212> DNA

<213> Homo Sapien

<400> 81

ccgagccggg cgcgagcga cggagctggg gccggcctgg gaccatgggc 50

gtgagtgcaa tctacggatc agtctctgat ggtgggtcgt taacctcagt 100

ggggactcca agatttccat gaagaaaatc agttgtcttc attcaagaat 150

tggggctctgg ctcaagaattc ctgcagctgg tgaaaatctg ttttctagaa 200

gtgttgcat tgaatatgtc tgtttctata aataaatttt ttaagaataa 3150

<210> 82

<211> 480

<212> PRT

<213> Homo Sapien

<400> 82

Met	Leu	Phe	Arg	Asn	Arg	Phe	Leu	Leu	Leu	Leu	Ala	Leu	Ala	Ala	
1				5					10					15	
Leu	Leu	Ala	Phe	Val	Ser	Leu	Ser	Leu	Gln	Phe	Phe	His	Leu	Ile	
				20					25					30	
Pro	Val	Ser	Thr	Pro	Lys	Asn	Gly	Met	Ser	Ser	Lys	Ser	Arg	Lys	
				35					40					45	
Arg	Ile	Met	Pro	Asp	Pro	Val	Thr	Glu	Pro	Pro	Val	Thr	Asp	Pro	
				50					55					60	
Val	Tyr	Glu	Ala	Leu	Leu	Tyr	Cys	Asn	Ile	Pro	Ser	Val	Ala	Glu	
				65					70					75	
Arg	Ser	Met	Glu	Gly	His	Ala	Pro	His	His	Phe	Lys	Leu	Val	Ser	
				80					85					90	
Val	His	Val	Phe	Ile	Arg	His	Gly	Asp	Arg	Tyr	Pro	Leu	Tyr	Val	
				95					100					105	
Ile	Pro	Lys	Thr	Lys	Arg	Pro	Glu	Ile	Asp	Cys	Thr	Leu	Val	Ala	
				110					115					120	
Asn	Arg	Lys	Pro	Tyr	His	Pro	Lys	Leu	Glu	Ala	Phe	Ile	Ser	His	
				125					130					135	
Met	Ser	Lys	Gly	Ser	Gly	Ala	Ser	Phe	Glu	Ser	Pro	Leu	Asn	Ser	
				140					145					150	
Leu	Pro	Leu	Tyr	Pro	Asn	His	Pro	Leu	Cys	Glu	Met	Gly	Glu	Leu	
				155					160					165	
Thr	Gln	Thr	Gly	Val	Val	Gln	His	Leu	Gln	Asn	Gly	Gln	Leu	Leu	
				170					175					180	
Arg	Asp	Ile	Tyr	Leu	Lys	Lys	His	Lys	Leu	Leu	Pro	Asn	Asp	Trp	
				185					190					195	
Ser	Ala	Asp	Gln	Leu	Tyr	Leu	Glu	Thr	Thr	Gly	Lys	Ser	Arg	Thr	
				200					205					210	
Leu	Gln	Ser	Gly	Leu	Ala	Leu	Leu	Tyr	Gly	Phe	Leu	Pro	Asp	Phe	
				215					220					225	
Asp	Trp	Lys	Lys	Ile	Tyr	Phe	Arg	His	Gln	Pro	Ser	Ala	Leu	Phe	
				230					235					240	
Cys	Ser	Gly	Ser	Cys	Tyr	Cys	Pro	Val	Arg	Asn	Gln	Tyr	Leu	Glu	
				245					250					255	

Lys Glu Gln Arg Arg Gln Tyr Leu Leu Arg Leu Lys Asn Ser Gln
260 265 270

Leu Glu Lys Thr Tyr Gly Glu Met Ala Lys Ile Val Asp Val Pro
275 280 285

Thr Lys Gln Leu Arg Ala Ala Asn Pro Ile Asp Ser Met Leu Cys
290 295 300

His Phe Cys His Asn Val Ser Phe Pro Cys Thr Arg Asn Gly Cys
305 310 315

Val Asp Met Glu His Phe Lys Val Ile Lys Thr His Gln Ile Glu
320 325 330

Asp Glu Arg Glu Arg Arg Glu Lys Lys Leu Tyr Phe Gly Tyr Ser
335 340 345

Leu Leu Gly Ala His Pro Ile Leu Asn Gln Thr Ile Gly Arg Met
350 355 360

Gln Arg Ala Thr Glu Gly Arg Lys Glu Glu Leu Phe Ala Leu Tyr
365 370 375

Ser Ala His Asp Val Thr Leu Ser Pro Val Leu Ser Ala Leu Gly
380 385 390

Leu Ser Glu Ala Arg Phe Pro Arg Phe Ala Ala Arg Leu Ile Phe
395 400 405

Glu Leu Trp Gln Asp Arg Glu Lys Pro Ser Glu His Ser Val Arg
410 415 420

Ile Leu Tyr Asn Gly Val Asp Val Thr Phe His Thr Ser Phe Cys
425 430 435

Gln Asp His His Lys Arg Ser Pro Lys Pro Met Cys Pro Leu Glu
440 445 450

Asn Leu Val Arg Phe Val Lys Arg Asp Met Phe Val Ala Leu Gly
455 460 465

Gly Ser Gly Thr Asn Tyr Tyr Asp Ala Cys His Arg Glu Gly Phe
470 475 480

<210> 83

<211> 3127

<212> DNA

<213> Homo Sapien

<400> 83

tctcgcatgat agtaaataat ctcggaagagg cgagaaagaa gctgtctcca 50

tcttgtctgt atccgctgct cttgtgacgt tgtggagatg gggagcgtcc 100

tggggctgtg ctccatggcg agctggatac catgtttgtg tggaagtgcc 150

ccgtgtttgc tatgccgatg ctgtcctagt ggaaacaact ccactgtaac 200

tagattgatc tatgcacttt tcttgcttgt tggagtatgt gtagcttgtg 250
 taatgttgat accaggaatg gaagaacaac tgaataagat tcctggattt 300
 tgtgagaatg agaaagggtg tgtcccttgt aacatttttg ttggctataa 350
 agctgtatat cgtttgtgct ttggtttggc tatgttctat cttcttctct 400
 ctttactaat gatcaaagtg aagagtagca gtgacctag agctgcagtg 450
 cacaatggat tttggttctt taaatttgct gcagcaattg caattattat 500
 tggggcattc ttcattccag aaggaacttt tacaactgtg tggttttatg 550
 taggcacggc aggtgccttt tgtttcatcc tcatacaact agtcttactt 600
 attgattttg cacattcatg gaatgaatcg tgggttgaaa aaatggaaga 650
 agggaaactcg agatgttggt atgcagcctt gttatcagct acagctctga 700
 attatctgct gtctttagtt gctatcgctc tgttctttgt ctactacact 750
 catccagcca gttgttcaga aaacaaggcg ttcacagtg tcaacatgct 800
 cctctgcggt ggtgcttctg taatgtctat actgccaaaa atccaagaat 850
 cacaaccaag atctggtttg ttacagtctt cagtaattac agtctacaca 900
 atgtatttga catggtcagc tatgaccaat gaaccagaaa caaattgcaa 950
 cccaagtcta ctaagcataa ttggctacaa tacaacaagc actgtcccaa 1000
 aggaagggca gtcagtcacg tgggtggcatg ctcaaggaat tataggacta 1050
 attctctttt tgttgtgtgt attttattcc agcatccgta cttcaaacaa 1100
 tagtcagggt aataaactga ctctaacaag tgatgaatct acattaatag 1150
 aagatgggtg agctagaagt gatggatcac tggaggatgg ggacgatggt 1200
 caccgagctg tagataatga aagggatggt gtcacttaca gttattcctt 1250
 ctttcacttc atgcttttcc tggcttcact ttatatcatg atgaccctta 1300
 ccaactggtc caggtatgaa cctctcgtg agatgaaaag tcagtggaca 1350
 gctgtctggg tgaaaatctc ttccagttgg attggcatcg tgctgtatgt 1400
 ttggacactc gtggcaccac ttgttcttac aaatcgtgat tttgactgag 1450
 tgagacttct agcatgaaag tcccactttg attattgctt atttgaaaac 1500
 agtattccca acttttgtaa agttgtgtat gtttttgctt cccatgtaac 1550
 ttctccagtg ttctggcatg aattagattt tactgcttgt cattttgtta 1600
 ttttcttacc aagtgcattg atatgtgaag tagaatgaat tgacagaggaa 1650

atgaattcag agaaaaaaaa aaaaaaa 3127

<210> 84

<211> 453

<212> PRT

<213> Homo Sapien

<400> 84

Met	Gly	Ser	Val	Leu	Gly	Leu	Cys	Ser	Met	Ala	Ser	Trp	Ile	Pro
1				5					10					15
Cys	Leu	Cys	Gly	Ser	Ala	Pro	Cys	Leu	Leu	Cys	Arg	Cys	Cys	Pro
				20					25					30
Ser	Gly	Asn	Asn	Ser	Thr	Val	Thr	Arg	Leu	Ile	Tyr	Ala	Leu	Phe
				35					40					45
Leu	Leu	Val	Gly	Val	Cys	Val	Ala	Cys	Val	Met	Leu	Ile	Pro	Gly
				50					55					60
Met	Glu	Glu	Gln	Leu	Asn	Lys	Ile	Pro	Gly	Phe	Cys	Glu	Asn	Glu
				65					70					75
Lys	Gly	Val	Val	Pro	Cys	Asn	Ile	Leu	Val	Gly	Tyr	Lys	Ala	Val
				80					85					90
Tyr	Arg	Leu	Cys	Phe	Gly	Leu	Ala	Met	Phe	Tyr	Leu	Leu	Leu	Ser
				95					100					105
Leu	Leu	Met	Ile	Lys	Val	Lys	Ser	Ser	Ser	Asp	Pro	Arg	Ala	Ala
				110					115					120
Val	His	Asn	Gly	Phe	Trp	Phe	Phe	Lys	Phe	Ala	Ala	Ala	Ile	Ala
				125					130					135
Ile	Ile	Ile	Gly	Ala	Phe	Phe	Ile	Pro	Glu	Gly	Thr	Phe	Thr	Thr
				140					145					150
Val	Trp	Phe	Tyr	Val	Gly	Met	Ala	Gly	Ala	Phe	Cys	Phe	Ile	Leu
				155					160					165
Ile	Gln	Leu	Val	Leu	Leu	Ile	Asp	Phe	Ala	His	Ser	Trp	Asn	Glu
				170					175					180
Ser	Trp	Val	Glu	Lys	Met	Glu	Glu	Gly	Asn	Ser	Arg	Cys	Trp	Tyr
				185					190					195
Ala	Ala	Leu	Leu	Ser	Ala	Thr	Ala	Leu	Asn	Tyr	Leu	Leu	Ser	Leu
				200					205					210
Val	Ala	Ile	Val	Leu	Phe	Phe	Val	Tyr	Tyr	Thr	His	Pro	Ala	Ser
				215					220					225
Cys	Ser	Glu	Asn	Lys	Ala	Phe	Ile	Ser	Val	Asn	Met	Leu	Leu	Cys
				230					235					240
Val	Gly	Ala	Ser	Val	Met	Ser	Ile	Leu	Pro	Lys	Ile	Gln	Glu	Ser
				245					250					255

Gln Pro Arg Ser Gly Leu Leu Gln Ser Ser Val Ile Thr Val Tyr
260 265 270

Thr Met Tyr Leu Thr Trp Ser Ala Met Thr Asn Glu Pro Glu Thr
275 280 285

Asn Cys Asn Pro Ser Leu Leu Ser Ile Ile Gly Tyr Asn Thr Thr
290 295 300

Ser Thr Val Pro Lys Glu Gly Gln Ser Val Gln Trp Trp His Ala
305 310 315

Gln Gly Ile Ile Gly Leu Ile Leu Phe Leu Leu Cys Val Phe Tyr
320 325 330

Ser Ser Ile Arg Thr Ser Asn Asn Ser Gln Val Asn Lys Leu Thr
335 340 345

Leu Thr Ser Asp Glu Ser Thr Leu Ile Glu Asp Gly Gly Ala Arg
350 355 360

Ser Asp Gly Ser Leu Glu Asp Gly Asp Asp Val His Arg Ala Val
365 370 375

Asp Asn Glu Arg Asp Gly Val Thr Tyr Ser Tyr Ser Phe Phe His
380 385 390

Phe Met Leu Phe Leu Ala Ser Leu Tyr Ile Met Met Thr Leu Thr
395 400 405

Asn Trp Ser Arg Tyr Glu Pro Ser Arg Glu Met Lys Ser Gln Trp
410 415 420

Thr Ala Val Trp Val Lys Ile Ser Ser Ser Trp Ile Gly Ile Val
425 430 435

Leu Tyr Val Trp Thr Leu Val Ala Pro Leu Val Leu Thr Asn Arg
440 445 450

Asp Phe Asp

<210> 85
<211> 971
<212> DNA
<213> Homo Sapien

<400> 85
aacaaagttc agtgactgag agggctgagc ggaggctgct gaaggggaga 50
aaggagtgag gagctgctgg gcagagaggg actgtccggc tcccagatgc 100
tgggcctcct ggggagcaca gccctcgtgg gatggatcac aggtgctgct 150
gtggcggtcc tgctgctgct gctgctgctg gccacctgcc ttttccacgg 200
acggcaggac tgtgacgtgg agaggaaccg tacagctgca gggggaaacc 250

gagtccgccc ggcccagcct tggcccttcc ggcggcgggg ccacctggga 300
atctttcacc atcacgtca tcttgccac gtatctcatg tgccgaatgt 350
gggcctccac caccaccacc acccccgcga caccctcac cacctccacc 400
accaccacca cccccaccgc caccatcccc gccacgctcg ctgaggetgc 450
tgtcgccggt gcctgtggac agcagctgcc cctgccctcc catctgttcc 500
caggacaagt ggaccccatg tttccatgtg gaaggatgca tctctgggg 550
gaacgagggg aacaatagac tggggcttgc tccagctgca tttgcatggc 600
atgccccagt gtactatggc agcagagaat ggaggaacac tgggtctgca 650
gtgctgaagg gtttggggag tggagagcaa ggggtgctctt tcggggctgg 700
acagcccgtc ttgtgacagt gactcccagt gagccccaga aatgacaagc 750
gtgtcttggc agagccagca cacaagtgga tgtgaagtgc ccgtcttgac 800
ctcctcatca ggctgctgca ggctcttggc gggcagggca ctgggagagg 850
ccctgagaat gtccttttgg tttggagaag gcagtgtgag gctgcacagt 900
caattcatcg gtgccttagt ccaagaaaat aaaaaccact aagaagcttt 950
aaaaaaaaa aaaaaaaaaa a 971

<210> 86
<211> 115
<212> PRT
<213> Homo Sapien

<400> 86
Met Leu Gly Leu Leu Gly Ser Thr Ala Leu Val Gly Trp Ile Thr
1 5 10 15
Gly Ala Ala Val Ala Val Leu Leu Leu Leu Leu Leu Leu Ala Thr
20 25 30
Cys Leu Phe His Gly Arg Gln Asp Cys Asp Val Glu Arg Asn Arg
35 40 45
Thr Ala Ala Gly Gly Asn Arg Val Arg Arg Ala Gln Pro Trp Pro
50 55 60
Phe Arg Arg Arg Gly His Leu Gly Ile Phe His His His Arg His
65 70 75
Pro Gly His Val Ser His Val Pro Asn Val Gly Leu His His His
80 85 90
His His Pro Arg His Thr Pro His His Leu His His His His His
95 100 105
Pro His Arg His His Pro Arg His Ala Arg

<210> 87
 <211> 3305
 <212> DNA
 <213> Homo Sapien

<400> 87
 cccacgcgtc cgtcctagtc cccgggcca ctcggacagt ttgctcattt 50
 attgcaacgg tcaaggctgg cttgtgccag aacggcgcgc gcgcgcgcac 100
 gcacgcacac acacgggggg aaactttttt aaaaatgaaa ggctagaaga 150
 gctcagcggc ggcgcgggcg ctgcgcgagg gctccggagc tgactcgccg 200
 aggcaggaaa tccctccggt cgcgacgccc ggccccgggt cggcgccccg 250
 gtgggatggg gcagcgctcg ccgcccggcc cgagagctgc tgactgaag 300
 gccggcgacg atggcagcgc gcccgctgcc cgtgtcccc gcccgcgcc 350
 tcctgctcgc cctggccggg gctctgctcg cgccctgcga ggcccagggg 400
 gtgagcttat ggaaccaagg aagagctgat gaagtgtca gtgcctctgt 450
 tcggagtggg gacctctgga tcccagtga gagcttcgac tccaagaatc 500
 atccagaagt gctgaatatt cgactacaac gggaaagcaa agaactgac 550
 ataaatctgg aaagaaatga aggtctcatt gccagcagtt tcacggaaac 600
 ccactatctg caagacggta ctgatgtctc cctcgctcga aattacacgg 650
 gtcactgtta ctacatgga catgtacggg gatattctga ttcagcagtc 700
 agtctcagca cgtgttctgg tctcagggga cttattgtgt ttgaaaatga 750
 aagctatgtc ttagaaccaa tgaaaagtgc aaccaacaga tacaaactct 800
 tcccagcgaa gaagctgaaa agcgtccggg gatcatgtgg atcacatcac 850
 aacacaccaa acctcgctgc aaagaatgtg tttccaccac cctctcagac 900
 atgggcaaga aggcataaaa gagagaccct caaggcaact aagtatgtgg 950
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 gttttacaga ccactgaaca ttcggatcgt gttggtaggc gtggaagtgt 1100
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cagtgcagg aagggcagcg acttcctggt tgagcttctg ctaaaacatg 2750
gacatgcttc agtgctgctc ctgagagagt agcaggttac cactctggca 2800
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cctttcccca gtgacacctc agccttggca gccctgatga ctggtctctg 2950
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agcagggttt tagtttttaa ttatcagag accctgccac ccattccatc 3050
tccatccaag caaactgaat ggcaatgaaa caaactggag aagaaggtag 3100
gagaaagggc ggtgaactct ggctctttgc tgtggacatg cgtgaccagc 3150
agtactcagg tttgagggtt tgcagaaagc cagggaaccc acagagtcac 3200
caacccttca ttaacaagt aagaatgtta aaaagtgaaa acaatgtaag 3250
agcctaactc catccccgt ggccattact gcataaaata gattgcattt 3300
gaaat 3305

<210> 88
<211> 735
<212> PRT
<213> Homo Sapien

<400> 88
Met Ala Ala Arg Pro Leu Pro Val Ser Pro Ala Arg Ala Leu Leu
1 5 10 15
Leu Ala Leu Ala Gly Ala Leu Leu Ala Pro Cys Glu Ala Arg Gly
20 25 30
Val Ser Leu Trp Asn Gln Gly Arg Ala Asp Glu Val Val Ser Ala
35 40 45
Ser Val Arg Ser Gly Asp Leu Trp Ile Pro Val Lys Ser Phe Asp
50 55 60
Ser Lys Asn His Pro Glu Val Leu Asn Ile Arg Leu Gln Arg Glu
65 70 75
Ser Lys Glu Leu Ile Ile Asn Leu Glu Arg Asn Glu Gly Leu Ile
80 85 90
Ala Ser Ser Phe Thr Glu Thr His Tyr Leu Gln Asp Gly Thr Asp
95 100 105
Val Ser Leu Ala Arg Asn Tyr Thr Gly His Cys Tyr Tyr His Gly
110 115 120
His Val Arg Gly Tyr Ser Asp Ser Ala Val Ser Leu Ser Thr Cys
125 130 135

Ser Gly Leu Arg Gly Leu Ile Val Phe Glu Asn Glu Ser Tyr Val	140	145	150
Leu Glu Pro Met Lys Ser Ala Thr Asn Arg Tyr Lys Leu Phe Pro	155	160	165
Ala Lys Lys Leu Lys Ser Val Arg Gly Ser Cys Gly Ser His His	170	175	180
Asn Thr Pro Asn Leu Ala Ala Lys Asn Val Phe Pro Pro Pro Ser	185	190	195
Gln Thr Trp Ala Arg Arg His Lys Arg Glu Thr Leu Lys Ala Thr	200	205	210
Lys Tyr Val Glu Leu Val Ile Val Ala Asp Asn Arg Glu Phe Gln	215	220	225
Arg Gln Gly Lys Asp Leu Glu Lys Val Lys Gln Arg Leu Ile Glu	230	235	240
Ile Ala Asn His Val Asp Lys Phe Tyr Arg Pro Leu Asn Ile Arg	245	250	255
Ile Val Leu Val Gly Val Glu Val Trp Asn Asp Met Asp Lys Cys	260	265	270
Ser Val Ser Gln Asp Pro Phe Thr Ser Leu His Glu Phe Leu Asp	275	280	285
Trp Arg Lys Met Lys Leu Leu Pro Arg Lys Ser His Asp Asn Ala	290	295	300
Gln Leu Val Ser Gly Val Tyr Phe Gln Gly Thr Thr Ile Gly Met	305	310	315
Ala Pro Ile Met Ser Met Cys Thr Ala Asp Gln Ser Gly Gly Ile	320	325	330
Val Met Asp His Ser Asp Asn Pro Leu Gly Ala Ala Val Thr Leu	335	340	345
Ala His Glu Leu Gly His Asn Phe Gly Met Asn His Asp Thr Leu	350	355	360
Asp Arg Gly Cys Ser Cys Gln Met Ala Val Glu Lys Gly Gly Cys	365	370	375
Ile Met Asn Ala Ser Thr Gly Tyr Pro Phe Pro Met Val Phe Ser	380	385	390
Ser Cys Ser Arg Lys Asp Leu Glu Thr Ser Leu Glu Lys Gly Met	395	400	405
Gly Val Cys Leu Phe Asn Leu Pro Glu Val Arg Glu Ser Phe Gly	410	415	420
Gly Gln Lys Cys Gly Asn Arg Phe Val Glu Glu Gly Glu Glu Cys			

Asp Cys Gly Glu	Pro Glu Glu Cys Met	Asn Arg Cys Cys Asn	Ala
440		445	450
Thr Thr Cys Thr	Leu Lys Pro Asp Ala	Val Cys Ala His Gly	Leu
455		460	465
Cys Cys Glu Asp	Cys Gln Leu Lys Pro	Ala Gly Thr Ala Cys	Arg
470		475	480
Asp Ser Ser Asn	Ser Cys Asp Leu Pro	Glu Phe Cys Thr Gly	Ala
485		490	495
Ser Pro His Cys	Pro Ala Asn Val Tyr	Leu His Asp Gly His	Ser
500		505	510
Cys Gln Asp Val	Asp Gly Tyr Cys Tyr	Asn Gly Ile Cys Gln	Thr
515		520	525
His Glu Gln Gln	Cys Val Thr Leu Trp	Gly Pro Gly Ala Lys	Pro
530		535	540
Ala Pro Gly Ile	Cys Phe Glu Arg Val	Asn Ser Ala Gly Asp	Pro
545		550	555
Tyr Gly Asn Cys	Gly Lys Val Ser Lys	Ser Ser Phe Ala Lys	Cys
560		565	570
Glu Met Arg Asp	Ala Lys Cys Gly Lys	Ile Gln Cys Gln Gly	Gly
575		580	585
Ala Ser Arg Pro	Val Ile Gly Thr Asn	Ala Val Ser Ile Glu	Thr
590		595	600
Asn Ile Pro Leu	Gln Gln Gly Gly Arg	Ile Leu Cys Arg Gly	Thr
605		610	615
His Val Tyr Leu	Gly Asp Asp Met Pro	Asp Pro Gly Leu Val	Leu
620		625	630
Ala Gly Thr Lys	Cys Ala Asp Gly Lys	Ile Cys Leu Asn Arg	Gln
635		640	645
Cys Gln Asn Ile	Ser Val Phe Gly Val	His Glu Cys Ala Met	Gln
650		655	660
Cys His Gly Arg	Gly Val Cys Asn Asn	Arg Lys Asn Cys His	Cys
665		670	675
Glu Ala His Trp	Ala Pro Pro Phe Cys	Asp Lys Phe Gly Phe	Gly
680		685	690
Gly Ser Thr Asp	Ser Gly Pro Ile Arg	Gln Ala Glu Ala Arg	Gln
695		700	705
Glu Ala Ala Glu	Ser Asn Arg Glu Arg	Gly Gln Gly Gln Glu	Pro
710		715	720

Val	Gly	Ser	Gln	Glu	His	Ala	Ser	Thr	Ala	Ser	Leu	Thr	Leu	Ile
				725					730					735

<210> 89
 <211> 1316
 <212> DNA
 <213> Homo Sapien

<400> 89
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 aaatcggggg agtgaggcgg gccggcgcgg cgcgacaccg ggtccggaa 100
 ccaactgcacg acgggggtgg actgacctga aaaaaatgtc tggatttcta 150
 gagggcttga gatgctcaga atgcattgac tggggggaaa agcgcaatac 200
 tattgcttcc attgctgctg gtgtactatt ttttacaggc tgggtggatta 250
 tcatagatgc agctgttatt tatccacca tgaaagattt caaccactca 300
 taccatgcct gtggtgttat agcaaccata gccttcctaa tgattaatgc 350
 agtatcgaat ggacaagtcc gaggtgatag ttacagtga ggttgtctgg 400
 gtcaaacagg tgctcgcat tggcttttcg ttggtttcat gttggccttt 450
 ggatctctga ttgcatctat gtggattctt tttggagggt atgttgctaa 500
 agaaaaagac atagtatacc ctggaattgc tgtatttttc cagaatgcct 550
 tcatcttttt tggagggtcg gtttttaagt ttggccgcac tgaagactta 600
 tggcagtga cacaatctgat ttcccacagc acaacagccc tgcattgggt 650
 tgtttgtttt ttactgctc actcccaacc ttttgtaatg ccattttcta 700
 aacttatttc tgagtgtagt ctgagcttaa agttgtgtaa tactaaaatc 750
 acgagaacac ctaaacaaca accaaaaatc tattgtggta tgcattgat 800
 taacttataa aatgttagag gaaactttca catgaataat ttttgtcaa 850
 ttttatcatg gtataatttg taaaaataaa aagaaattac aaaagaaatt 900
 atggatttgt caatgtaagt atttgtcata tctgagggtcc aaaaccacaa 950
 tgaaagtgt ctgaagattt aatgtgttta ttcaaattgt gtctcttctg 1000
 tgtcaaatgt taaatgaaat ataaacattt tttagttttt aaaatattcc 1050
 gtgggtcaaaa ttcttcctca ctataattgg tatttacttt taccaaaaat 1100
 tctgtgaaca tgtaatgtaa ctggcttttg agggctctcc aaggggtgag 1150
 tggacgtgtt ggaagagaga agcaccatgg tccagccacc aggctccctg 1200
 tgtcccttcc atgggaaggt ctcccgctgt gcctctcatt ccaagggcag 1250

gaagatgtga ctcagccatg acacgtgggt ctggtgggat gcacagtcac 1300
tccacatcca ccaactg 1316

<210> 90
<211> 157
<212> PRT
<213> Homo Sapien

<400> 90
Met Ser Gly Phe Leu Glu Gly Leu Arg Cys Ser Glu Cys Ile Asp
1 5 10 15
Trp Gly Glu Lys Arg Asn Thr Ile Ala Ser Ile Ala Ala Gly Val
20 25 30
Leu Phe Phe Thr Gly Trp Trp Ile Ile Ile Asp Ala Ala Val Ile
35 40 45
Tyr Pro Thr Met Lys Asp Phe Asn His Ser Tyr His Ala Cys Gly
50 55 60
Val Ile Ala Thr Ile Ala Phe Leu Met Ile Asn Ala Val Ser Asn
65 70 75
Gly Gln Val Arg Gly Asp Ser Tyr Ser Glu Gly Cys Leu Gly Gln
80 85 90
Thr Gly Ala Arg Ile Trp Leu Phe Val Gly Phe Met Leu Ala Phe
95 100 105
Gly Ser Leu Ile Ala Ser Met Trp Ile Leu Phe Gly Gly Tyr Val
110 115 120
Ala Lys Glu Lys Asp Ile Val Tyr Pro Gly Ile Ala Val Phe Phe
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Arg Thr Glu Asp Leu Trp Gln
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<210> 91
<211> 3004
<212> DNA
<213> Homo Sapien

<400> 91
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tgacaaggag gccaggaaga aggttctcaa acaagctttt tcagccaacc 200
aagtgccgga gaagctggat gtggtggttaa ttggcagtggt ctttgggggc 250

ctggctgcag ctgcaattct agctaaagct ggcaagcgag tcctgggtgct 300
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 gccttgaatt tgacacagga atccattaca ttgggcgtat ggaagagggc 400
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 aaaa 3004

<210> 92
 <211> 610
 <212> PRT
 <213> Homo Sapien

<400> 92

Met	Trp	Leu	Pro	Leu	Val	Leu	Leu	Leu	Ala	Val	Leu	Leu	Leu	Ala	1	5	10	15
Val	Leu	Cys	Lys	Val	Tyr	Leu	Gly	Leu	Phe	Ser	Gly	Ser	Ser	Pro	20	25	30	
Asn	Pro	Phe	Ser	Glu	Asp	Val	Lys	Arg	Pro	Pro	Ala	Pro	Leu	Val	35	40	45	
Thr	Asp	Lys	Glu	Ala	Arg	Lys	Lys	Val	Leu	Lys	Gln	Ala	Phe	Ser	50	55	60	
Ala	Asn	Gln	Val	Pro	Glu	Lys	Leu	Asp	Val	Val	Val	Ile	Gly	Ser	65	70	75	
Gly	Phe	Gly	Gly	Leu	Ala	Ala	Ala	Ala	Ile	Leu	Ala	Lys	Ala	Gly	80	85	90	
Lys	Arg	Val	Leu	Val	Leu	Glu	Gln	His	Thr	Lys	Ala	Gly	Gly	Cys	95	100	105	
Cys	His	Thr	Phe	Gly	Lys	Asn	Gly	Leu	Glu	Phe	Asp	Thr	Gly	Ile	110	115	120	
His	Tyr	Ile	Gly	Arg	Met	Glu	Glu	Gly	Ser	Ile	Gly	Arg	Phe	Ile	125	130	135	
Leu	Asp	Gln	Ile	Thr	Glu	Gly	Gln	Leu	Asp	Trp	Ala	Pro	Leu	Ser	140	145	150	
Ser	Pro	Phe	Asp	Ile	Met	Val	Leu	Glu	Gly	Pro	Asn	Gly	Arg	Lys	155	160	165	
Glu	Tyr	Pro	Met	Tyr	Ser	Gly	Glu	Lys	Ala	Tyr	Ile	Gln	Gly	Leu	170	175	180	
Lys	Glu	Lys	Phe	Pro	Gln	Glu	Glu	Ala	Ile	Ile	Asp	Lys	Tyr	Ile	185	190	195	
Lys	Leu	Val	Lys	Val	Val	Ser	Ser	Gly	Ala	Pro	His	Ala	Ile	Leu	200	205	210	
Leu	Lys	Phe	Leu	Pro	Leu	Pro	Val	Val	Gln	Leu	Leu	Asp	Arg	Cys	215	220	225	
Gly	Leu	Leu	Thr	Arg	Phe	Ser	Pro	Phe	Leu	Gln	Ala	Ser	Thr	Gln	230	235	240	
Ser	Leu	Ala	Glu	Val	Leu	Gln	Gln	Leu	Gly	Ala	Ser	Ser	Glu	Leu	245	250	255	
Gln	Ala	Val	Leu	Ser	Tyr	Ile	Phe	Pro	Thr	Tyr	Gly	Val	Thr	Pro	260	265	270	
Asn	His	Ser	Ala	Phe	Ser	Met	His	Ala	Leu	Leu	Val	Asn	His	Tyr	275	280	285	

Ala	Ile	Leu	Lys	Arg	Asn	Leu	Tyr	Ser	Asp	Leu	Lys	Asn	Leu	Asp
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Ser	Arg	Ile	Arg	Ala	Gln	Lys	Lys	Lys	Asn					
				605					610					

<210> 93
 <211> 2461
 <212> DNA
 <213> Homo Sapien

<400> 93
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<210> 94

<211> 348

<212> PRT

<213> Homo Sapien

<400> 94

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Arg	Cys	Leu	Ser	Ala	Arg	Asp	Gly	Ser	Arg	Met	Leu	Leu	Leu	Leu	
				20					25					30	
Leu	Leu	Leu	Gly	Ser	Gly	Gln	Gly	Pro	Gln	Gln	Val	Gly	Ala	Gly	
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Gln	Thr	Phe	Glu	Tyr	Leu	Lys	Arg	Glu	His	Ser	Leu	Ser	Lys	Pro	
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Tyr	Gln	Gly	Val	Gly	Thr	Gly	Ser	Ser	Ser	Leu	Trp	Asn	Leu	Met	
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Gly	Asn	Ala	Met	Val	Met	Thr	Gln	Tyr	Ile	Arg	Leu	Thr	Pro	Asp	
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Met	Gln	Ser	Lys	Gln	Gly	Ala	Leu	Trp	Asn	Arg	Val	Pro	Cys	Phe	
				95					100					105	
Leu	Arg	Asp	Trp	Glu	Leu	Gln	Val	His	Phe	Lys	Ile	His	Gly	Gln	
				110					115					120	
Gly	Lys	Lys	Asn	Leu	His	Gly	Asp	Gly	Leu	Ala	Ile	Trp	Tyr	Thr	
				125					130					135	
Lys	Asp	Arg	Met	Gln	Pro	Gly	Pro	Val	Phe	Gly	Asn	Met	Asp	Lys	
				140					145					150	
Phe	Val	Gly	Leu	Gly	Val	Phe	Val	Asp	Thr	Tyr	Pro	Asn	Glu	Glu	
				155					160					165	
Lys	Gln	Gln	Glu	Arg	Val	Phe	Pro	Tyr	Ile	Ser	Ala	Met	Val	Asn	
				170					175					180	
Asn	Gly	Ser	Leu	Ser	Tyr	Asp	His	Glu	Arg	Asp	Gly	Arg	Pro	Thr	
				185					190					195	
Glu	Leu	Gly	Gly	Cys	Thr	Ala	Ile	Val	Arg	Asn	Leu	His	Tyr	Asp	
				200					205					210	
Thr	Phe	Leu	Val	Ile	Arg	Tyr	Val	Lys	Arg	His	Leu	Thr	Ile	Met	
				215					220					225	
Met	Asp	Ile	Asp	Gly	Lys	His	Glu	Trp	Arg	Asp	Cys	Ile	Glu	Val	
				230					235					240	
Pro	Gly	Val	Arg	Leu	Pro	Arg	Gly	Tyr	Tyr	Phe	Gly	Thr	Ser	Ser	
				245					250					255	
Ile	Thr	Gly	Asp	Leu	Ser	Asp	Asn	His	Asp	Val	Ile	Ser	Leu	Lys	
				260					265					270	

Leu Phe Glu Leu Thr Val Glu Arg Thr Pro Glu Glu Glu Lys Leu
 275 280 285
 His Arg Asp Val Phe Leu Pro Ser Val Asp Asn Met Lys Leu Pro
 290 295 300
 Glu Met Thr Ala Pro Leu Pro Pro Leu Ser Gly Leu Ala Leu Phe
 305 310 315
 Leu Ile Val Phe Phe Ser Leu Val Phe Ser Val Phe Ala Ile Val
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 Arg Phe Tyr

<210> 95
 <211> 2579
 <212> DNA
 <213> Homo Sapien

<400> 95
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<210> 96

<211> 555

<212> PRT

<213> Homo Sapien

<400> 96

Met	Pro	Ser	Trp	Ile	Gly	Ala	Val	Ile	Leu	Pro	Leu	Leu	Gly	Leu	1	5	10	15
Leu	Leu	Ser	Leu	Pro	Ala	Gly	Ala	Asp	Val	Lys	Ala	Arg	Ser	Cys	20	25	30	
Gly	Glu	Val	Arg	Gln	Ala	Tyr	Gly	Ala	Lys	Gly	Phe	Ser	Leu	Ala	35	40	45	
Asp	Ile	Pro	Tyr	Gln	Glu	Ile	Ala	Gly	Glu	His	Leu	Arg	Ile	Cys	50	55	60	
Pro	Gln	Glu	Tyr	Thr	Cys	Cys	Thr	Thr	Glu	Met	Glu	Asp	Lys	Leu	65	70	75	
Ser	Gln	Gln	Ser	Lys	Leu	Glu	Phe	Glu	Asn	Leu	Val	Glu	Glu	Thr	80	85	90	
Ser	His	Phe	Val	Arg	Thr	Thr	Phe	Val	Ser	Arg	His	Lys	Lys	Phe	95	100	105	
Asp	Glu	Phe	Phe	Arg	Glu	Leu	Leu	Glu	Asn	Ala	Glu	Lys	Ser	Leu	110	115	120	
Asn	Asp	Met	Phe	Val	Arg	Thr	Tyr	Gly	Met	Leu	Tyr	Met	Gln	Asn	125	130	135	
Ser	Glu	Val	Phe	Gln	Asp	Leu	Phe	Thr	Glu	Leu	Lys	Arg	Tyr	Tyr	140	145	150	
Thr	Gly	Gly	Asn	Val	Asn	Leu	Glu	Glu	Met	Leu	Asn	Asp	Phe	Trp	155	160	165	
Ala	Arg	Leu	Leu	Glu	Arg	Met	Phe	Gln	Leu	Ile	Asn	Pro	Gln	Tyr	170	175	180	
His	Phe	Ser	Glu	Asp	Tyr	Leu	Glu	Cys	Val	Ser	Lys	Tyr	Thr	Asp	185	190	195	
Gln	Leu	Lys	Pro	Phe	Gly	Asp	Val	Pro	Arg	Lys	Leu	Lys	Ile	Gln				

Val Thr Arg Ala	Phe Ile Ala Ala Arg	Thr Phe Val Gln Gly Leu
215	220	225
Thr Val Gly Arg	Glu Val Ala Asn Arg	Val Ser Lys Val Ser Pro
230	235	240
Thr Pro Gly Cys	Ile Arg Ala Leu Met	Lys Met Leu Tyr Cys Pro
245	250	255
Tyr Cys Arg Gly	Leu Pro Thr Val Arg	Pro Cys Asn Asn Tyr Cys
260	265	270
Leu Asn Val Met	Lys Gly Cys Leu Ala	Asn Gln Ala Asp Leu Asp
275	280	285
Thr Glu Trp Asn	Leu Phe Ile Asp Ala	Met Leu Leu Val Ala Glu
290	295	300
Arg Leu Glu Gly	Pro Phe Asn Ile Glu	Ser Val Met Asp Pro Ile
305	310	315
Asp Val Lys Ile	Ser Glu Ala Ile Met	Asn Met Gln Glu Asn Ser
320	325	330
Met Gln Val Ser	Ala Lys Val Phe Gln	Gly Cys Gly Gln Pro Lys
335	340	345
Pro Ala Pro Ala	Leu Arg Ser Ala Arg	Ser Ala Pro Glu Asn Phe
350	355	360
Asn Thr Arg Phe	Arg Pro Tyr Asn Pro	Glu Glu Arg Pro Thr Thr
365	370	375
Ala Ala Gly Thr	Ser Leu Asp Arg Leu	Val Thr Asp Ile Lys Glu
380	385	390
Lys Leu Lys Leu	Ser Lys Lys Val Trp	Ser Ala Leu Pro Tyr Thr
395	400	405
Ile Cys Lys Asp	Glu Ser Val Thr Ala	Gly Thr Ser Asn Glu Glu
410	415	420
Glu Cys Trp Asn	Gly His Ser Lys Ala	Arg Tyr Leu Pro Glu Ile
425	430	435
Met Asn Asp Gly	Leu Thr Asn Gln Ile	Asn Asn Pro Glu Val Asp
440	445	450
Val Asp Ile Thr	Arg Pro Asp Thr Phe	Ile Arg Gln Gln Ile Met
455	460	465
Ala Leu Arg Val	Met Thr Asn Lys Leu	Lys Asn Ala Tyr Asn Gly
470	475	480
Asn Asp Val Asn	Phe Gln Asp Thr Ser	Asp Glu Ser Ser Gly Ser
485	490	495

	200		205		210
Gly Gly Ala Gly Cys Cys Thr Cys Cys Cys Ala Cys Gly Ala Ala	215		220		225
Thr Gly Gly Gly Ala Ala Gly Gly Thr Thr Thr Thr Ala Thr Thr	230		235		240
Gly Ala Ala Ala Ala Cys Thr Ala Cys Ala Gly Cys Thr Gly Gly	245		250		255
Ala Gly Ala Thr Ala Thr Thr Gly Ala Cys Ala Thr Ala Gly Ala	260		265		270
Gly Thr Thr Gly Thr Gly Gly Thr Cys Cys Ala Ala Ala Gly Ala	275		280		285
Ala Gly Cys Thr Cys Cys Thr Ala Ala Ala Gly Cys Thr Thr Gly	290		295		300
Cys Ala Gly Ala Ala Ala Thr Thr Thr Thr Ala Thr Cys Cys Ala	305		310		315
Ala Cys Thr Thr Thr Gly Thr Thr Thr Gly Gly Ala Ala Gly Cys	320		325		330
Thr Thr Ala Thr Thr Ala Thr Gly Ala Cys Ala Ala Thr Ala Cys	335		340		345
Cys Ala Thr Thr Thr Thr Thr Cys Ala Thr Ala Gly Ala Gly Thr	350		355		360
Thr Gly Thr Gly Cys Cys Thr Gly Gly Thr Thr Thr Cys Ala Thr	365		370		375
Ala Gly Thr Cys Cys Ala Ala Gly Gly Cys Gly Gly Ala Gly Ala	380		385		390
Thr Cys Cys Thr Ala Cys Thr Gly Gly Cys Ala Cys Ala Gly Gly	395		400		405
Gly Ala Gly Thr Gly Gly Thr Gly Gly Ala Gly Ala Gly Thr Cys	410		415		420
Thr Ala Thr Cys Thr Ala Thr Gly Gly Ala Gly Cys Gly Cys Cys	425		430		435
Ala Thr Thr Cys Ala Ala Ala Gly Ala Thr Gly Ala Ala Thr Thr	440		445		450
Thr Cys Ala Thr Thr Cys Ala Cys Gly Gly Thr Thr Gly Cys Gly	455		460		465
Thr Thr Thr Thr Ala Ala Thr Cys Gly Gly Ala Gly Ala Gly Gly	470		475		480
Ala Cys Thr Gly Gly Thr Thr Gly Cys Cys Ala Thr Gly Gly Cys	485		490		495

Ala	Ala	Ala	Thr	Gly	Cys	Thr	Gly	Gly	Thr	Thr	Cys	Thr	Cys	Ala	
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Thr	Gly	Ala	Thr	Ala	Ala	Thr	Gly	Gly	Cys	Ala	Gly	Cys	Cys	Ala	
				515						520				525	
Gly	Thr	Thr	Thr	Thr	Thr	Cys	Thr	Thr	Cys	Ala	Cys	Ala	Cys	Thr	
				530						535				540	
Gly	Gly	Gly	Thr	Cys	Gly	Ala	Gly	Cys	Ala	Gly	Ala	Thr	Gly	Ala	
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Ala	Cys	Thr	Thr	Ala	Ala	Cys	Ala	Ala	Thr	Ala	Ala	Gly	Cys	Ala	
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Thr	Ala	Cys	Cys	Ala	Thr	Cys	Thr	Thr	Thr	Gly	Gly	Ala	Ala	Ala	
				575						580				585	
Gly	Gly	Thr	Thr	Ala	Cys	Ala	Gly	Gly	Gly	Gly	Ala	Thr	Ala	Cys	
				590						595				600	
Ala	Gly	Thr	Ala	Thr	Ala	Thr	Ala	Ala	Cys	Ala	Thr	Gly	Thr	Thr	
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Gly	Cys	Gly	Ala	Cys	Thr	Gly	Thr	Cys	Ala	Gly	Ala	Ala	Gly	Thr	
				620						625				630	
Ala	Gly	Ala	Cys	Ala	Thr	Thr	Gly	Ala	Thr	Gly	Ala	Thr	Gly	Ala	
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Cys	Gly	Ala	Ala	Ala	Gly	Ala	Cys	Cys	Ala	Cys	Ala	Thr	Ala	Ala	
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Thr	Cys	Cys	Ala	Cys	Ala	Cys	Ala	Ala	Ala	Ala	Thr	Ala	Ala	Ala	
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Gly	Thr	Thr	Thr	Ala	Ala	Thr	Cys	Cys	Thr	Thr	Thr	Thr	Gly	Ala	
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Ala	Gly	Ala	Gly	Gly	Ala	Gly	Gly	Ala	Ala	Gly	Thr	Ala	Ala	Ala	
				755						760				765	
Gly	Ala	Ala	Ala	Thr	Thr	Gly	Ala	Ala	Ala	Cys	Cys	Cys	Ala	Ala	
				770						775				780	
Ala	Gly	Gly	Cys	Ala	Cys	Ala	Ala	Ala	Ala	Ala	Ala	Thr	Thr	Thr	

	785	790	795
Thr Ala Gly Thr	Thr Thr Ala Cys Thr	Thr Thr Cys Ala Thr	Thr
	800	805	810
Thr Gly Gly Ala	Gly Ala Gly Gly Ala	Ala Gly Cys Thr Gly	Ala
	815	820	825
Gly Gly Ala Ala	Gly Ala Ala Gly Ala	Gly Gly Ala Gly Gly	Ala
	830	835	840
Ala Gly Thr Ala	Ala Ala Thr Cys Gly	Ala Gly Thr Thr Ala	Gly
	845	850	855
Thr Cys Ala Gly	Ala Gly Cys Ala Thr	Gly Ala Ala Gly Gly	Gly
	860	865	870
Cys Ala Ala Ala	Ala Gly Cys Ala Ala	Ala Ala Gly Thr Ala	Gly
	875	880	885
Thr Cys Ala Thr	Gly Ala Cys Thr Thr	Gly Cys Thr Thr Ala	Ala
	890	895	900
Gly Gly Ala Thr	Gly Ala Thr Cys Cys	Ala Cys Ala Thr Cys	Thr
	905	910	915
Cys Ala Gly Thr	Thr Cys Thr Gly Thr	Thr Cys Cys Ala Gly	Thr
	920	925	930
Thr Gly Thr Ala	Gly Ala Ala Ala Gly	Thr Gly Ala Ala Ala	Ala
	935	940	945
Ala Gly Gly Thr	Gly Ala Thr Gly Cys	Ala Cys Cys Ala Gly	Ala
	950	955	960
Thr Thr Thr Ala	Gly Thr Thr Gly Ala	Thr Gly Ala Thr Gly	Gly
	965	970	975
Ala Gly Ala Ala	Gly Ala Thr Gly Ala	Ala Ala Gly Thr Gly	Cys
	980	985	990
Ala Gly Ala Gly	Cys Ala Thr Gly Ala	Thr Gly Ala Ala Thr	Ala
	995	1000	1005
Thr Ala Thr Thr	Gly Ala Thr Gly Gly	Thr Gly Ala Thr Gly	Ala
	1010	1015	1020
Ala Ala Ala Gly	Ala Ala Cys Cys Thr	Gly Ala Thr Gly Ala	Gly
	1025	1030	1035
Ala Gly Ala Ala	Ala Gly Ala Ala Thr	Thr Gly Cys Cys Ala	Ala
	1040	1045	1050
Ala Ala Ala Ala	Thr Thr Ala Ala Ala	Ala Ala Gly Gly Ala	
	1055	1060	1065
Cys Ala Cys Ala	Ala Gly Thr Gly Cys	Gly Ala Ala Thr Gly	Thr
	1070	1075	1080

Thr Ala Ala Ala Thr Cys Ala Gly Cys Thr Gly Gly Ala Gly Ala	1085	1090	1095
Ala Gly Gly Ala Gly Ala Ala Gly Thr Gly Gly Ala Gly Ala Ala	1100	1105	1110
Gly Ala Ala Ala Thr Cys Ala Gly Thr Cys Ala Gly Cys Cys Gly	1115	1120	1125
Cys Ala Gly Thr Gly Ala Ala Gly Ala Gly Cys Thr Cys Ala Gly	1130	1135	1140
Ala Ala Ala Ala Gly Ala Ala Gly Cys Ala Ala Gly Ala Cys Ala	1145	1150	1155
Ala Thr Thr Ala Ala Ala Ala Cys Gly Gly Gly Ala Ala Cys Thr	1160	1165	1170
Cys Thr Thr Ala Gly Cys Ala Gly Cys Ala Ala Ala Ala Cys Ala	1175	1180	1185
Ala Ala Ala Ala Ala Ala Ala Ala Gly Thr Ala Gly Ala Ala Ala Ala	1190	1195	1200
Thr Gly Cys Ala Gly Cys Ala Ala Ala Ala Cys Ala Ala Gly Cys	1205	1210	1215
Ala Gly Ala Ala Ala Ala Ala Ala Gly Ala Ala Gly Thr Gly Ala	1220	1225	1230
Ala Gly Ala Gly Gly Ala Ala Gly Ala Ala Gly Cys Cys Cys Cys	1235	1240	1245
Thr Cys Cys Ala Gly Ala Thr Gly Gly Thr Gly Cys Thr Gly Thr	1250	1255	1260
Thr Gly Cys Cys Gly Ala Ala Thr Ala Cys Ala Gly Ala Ala Gly	1265	1270	1275
Ala Gly Ala Ala Ala Ala Gly Cys Ala Ala Ala Ala Gly Thr Ala	1280	1285	1290
Thr Gly Ala Ala Gly Cys Thr Thr Thr Gly Ala Gly Gly Ala Ala	1295	1300	1305
Gly Cys Ala Ala Cys Ala Gly Thr Cys Ala Ala Ala Gly Ala Ala	1310	1315	1320
Gly Gly Gly Ala Ala Cys Thr Thr Cys Cys Cys Gly Gly Gly Ala	1325	1330	1335
Ala Gly Ala Thr Cys Ala Gly Ala Cys Cys Cys Thr Thr Gly Cys	1340	1345	1350
Ala Cys Thr Gly Cys Thr Gly Ala Ala Cys Cys Ala Gly Thr Thr	1355	1360	1365
Thr Ala Ala Ala Thr Cys Thr Ala Ala Ala Cys Thr Cys Ala Cys			

Cys Ala Gly Cys Cys Ala Thr Thr Gly Thr Thr Cys Cys Cys Ala
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Ala Cys Ala Gly Cys Ala Thr Cys Ala Cys Thr Thr Ala Gly Gly
1685 1690 1695

Gly Gly Thr Gly Thr Gly Ala Ala Ala Ala Gly Ala Ala Gly Thr
1700 1705 1710

Ala Thr Thr Thr Thr Thr Thr Gly Ala Ala Cys Cys Thr Gly Thr Thr
1715 1720 1725

Gly Thr Cys Thr Gly Gly Thr Thr Thr Thr Gly Ala Ala Ala Ala
1730 1735 1740

Ala Cys Ala Ala Thr Thr Ala Thr Cys Thr Thr Gly Thr Thr Thr
1745 1750 1755

Thr Gly Cys Ala Ala Ala Thr Thr Gly Thr Gly Gly Ala Ala Thr
1760 1765 1770

Gly Ala Thr Gly Thr Ala Ala Gly Cys Ala Ala Ala Thr Gly Cys
1775 1780 1785

Thr Thr Thr Thr Gly Gly Thr Thr Ala Cys Thr Gly Gly Thr Ala
1790 1795 1800

Cys Ala Thr Gly Thr Gly Thr Thr Thr Thr Thr Thr Cys Cys Thr
1805 1810 1815

Ala Gly Cys Thr Gly Ala Cys Cys Thr Thr Thr Thr Ala Thr Ala
1820 1825 1830

Thr Thr Gly Cys Thr Ala Ala Ala Thr Cys Thr Gly Ala Ala Ala
1835 1840 1845

Thr Ala Ala Ala Ala Thr Ala Ala Cys Thr Thr Thr Cys Cys Thr
1850 1855 1860

Thr Cys Cys Ala Cys Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala
1865 1870 1875

Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala
1880 1885 1890

Ala Ala Ala Ala

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<211> 472
<212> PRT
<213> Homo Sapien

<400> 98
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Leu Leu Lys Thr Thr Ala Gly Asp Ile Asp Ile Glu Leu Trp Ser

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Lys	Glu	Ala	Pro	Lys	Ala	Cys	Arg	Asn	Phe	Ile	Gln	Leu	Cys	Leu					
				35					40					45					
Glu	Ala	Tyr	Tyr	Asp	Asn	Thr	Ile	Phe	His	Arg	Val	Val	Pro	Gly					
				50					55					60					
Phe	Ile	Val	Gln	Gly	Gly	Asp	Pro	Thr	Gly	Thr	Gly	Ser	Gly	Gly					
				65					70					75					
Glu	Ser	Ile	Tyr	Gly	Ala	Pro	Phe	Lys	Asp	Glu	Phe	His	Ser	Arg					
				80					85					90					
Leu	Arg	Phe	Asn	Arg	Arg	Gly	Leu	Val	Ala	Met	Ala	Asn	Ala	Gly					
				95					100					105					
Ser	His	Asp	Asn	Gly	Ser	Gln	Phe	Phe	Phe	Thr	Leu	Gly	Arg	Ala					
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Asp	Glu	Leu	Asn	Asn	Lys	His	Thr	Ile	Phe	Gly	Lys	Val	Thr	Gly					
				125					130					135					
Asp	Thr	Val	Tyr	Asn	Met	Leu	Arg	Leu	Ser	Glu	Val	Asp	Ile	Asp					
				140					145					150					
Asp	Asp	Glu	Arg	Pro	His	Asn	Pro	His	Lys	Ile	Lys	Ser	Cys	Glu					
				155					160					165					
Val	Leu	Phe	Asn	Pro	Phe	Asp	Asp	Ile	Ile	Pro	Arg	Glu	Ile	Lys					
				170					175					180					
Arg	Leu	Lys	Lys	Glu	Lys	Pro	Glu	Glu	Glu	Val	Lys	Lys	Leu	Lys					
				185					190					195					
Pro	Lys	Gly	Thr	Lys	Asn	Phe	Ser	Leu	Leu	Ser	Phe	Gly	Glu	Glu					
				200					205					210					
Ala	Glu	Glu	Glu	Glu	Glu	Glu	Val	Asn	Arg	Val	Ser	Gln	Ser	Met					
				215					220					225					
Lys	Gly	Lys	Ser	Lys	Ser	Ser	His	Asp	Leu	Leu	Lys	Asp	Asp	Pro					
				230					235					240					
His	Leu	Ser	Ser	Val	Pro	Val	Val	Glu	Ser	Glu	Lys	Gly	Asp	Ala					
				245					250					255					
Pro	Asp	Leu	Val	Asp	Asp	Gly	Glu	Asp	Glu	Ser	Ala	Glu	His	Asp					
				260					265					270					
Glu	Tyr	Ile	Asp	Gly	Asp	Glu	Lys	Asn	Leu	Met	Arg	Glu	Arg	Ile					
				275					280					285					
Ala	Lys	Lys	Leu	Lys	Lys	Asp	Thr	Ser	Ala	Asn	Val	Lys	Ser	Ala					
				290					295					300					
Gly	Glu	Gly	Glu	Val	Glu	Lys	Lys	Ser	Val	Ser	Arg	Ser	Glu	Glu					
				305					310					315					

Leu Arg Lys Glu Ala Arg Gln Leu Lys Arg Glu Leu Leu Ala Ala
320 325 330

Lys Gln Lys Lys Val Glu Asn Ala Ala Lys Gln Ala Glu Lys Arg
335 340 345

Ser Glu Glu Glu Glu Ala Pro Pro Asp Gly Ala Val Ala Glu Tyr
350 355 360

Arg Arg Glu Lys Gln Lys Tyr Glu Ala Leu Arg Lys Gln Gln Ser
365 370 375

Lys Lys Gly Thr Ser Arg Glu Asp Gln Thr Leu Ala Leu Leu Asn
380 385 390

Gln Phe Lys Ser Lys Leu Thr Gln Ala Ile Ala Glu Thr Pro Glu
395 400 405

Asn Asp Ile Pro Glu Thr Glu Val Glu Asp Asp Glu Gly Trp Met
410 415 420

Ser His Val Leu Gln Phe Glu Asp Lys Ser Arg Lys Val Lys Asp
425 430 435

Ala Ser Met Gln Asp Ser Asp Thr Phe Glu Ile Tyr Asp Pro Arg
440 445 450

Asn Pro Val Asn Lys Arg Arg Arg Glu Glu Ser Lys Lys Leu Met
455 460 465

Arg Glu Lys Lys Glu Arg Arg
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<211> 1016
<212> DNA
<213> Homo Sapien

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gtctggatat tgatagccgt cctaccgctg aagtctgtgc cacacacaca 150
atttcaccag gacccaaagg agatgatggg gaaaaaggag atccaggaga 200
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ttgttggaaca actggatatt agtattgctc ggctcaagac atctatgaag 450
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ctacatcgtg caggaagaga agaactacag ggaatcccta acccactgca 550
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<210> 100

<211> 277

<212> PRT

<213> Homo Sapien

<400> 100

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Asp	Ser	Arg	Pro	Thr	Ala	Glu	Val	Cys	Ala	Thr	His	Thr	Ile	Ser	35	40	45	
Pro	Gly	Pro	Lys	Gly	Asp	Asp	Gly	Glu	Lys	Gly	Asp	Pro	Gly	Glu	50	55	60	
Glu	Gly	Lys	His	Gly	Lys	Val	Gly	Arg	Met	Gly	Pro	Lys	Gly	Ile	65	70	75	
Lys	Gly	Glu	Leu	Gly	Asp	Met	Gly	Asp	Gln	Gly	Asn	Ile	Gly	Lys	80	85	90	
Thr	Gly	Pro	Ile	Gly	Lys	Lys	Gly	Asp	Lys	Gly	Glu	Lys	Gly	Leu	95	100	105	
Leu	Gly	Ile	Pro	Gly	Glu	Lys	Gly	Lys	Ala	Gly	Thr	Val	Cys	Asp	110	115	120	
Cys	Gly	Arg	Tyr	Arg	Lys	Phe	Val	Gly	Gln	Leu	Asp	Ile	Ser	Ile	125	130	135	
Ala	Arg	Leu	Lys	Thr	Ser	Met	Lys	Phe	Val	Lys	Asn	Val	Ile	Ala	140	145	150	

Gly Ile Arg Glu Thr Glu Glu Lys Phe Tyr Tyr Ile Val Gln Glu
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Glu Lys Asn Tyr Arg Glu Ser Leu Thr His Cys Arg Ile Arg Gly
170 175 180

Gly Met Leu Ala Met Pro Lys Asp Glu Ala Ala Asn Thr Leu Ile
185 190 195

Ala Asp Tyr Val Ala Lys Ser Gly Phe Phe Arg Val Phe Ile Gly
200 205 210

Val Asn Asp Leu Glu Arg Glu Gly Gln Tyr Met Ser Thr Asp Asn
215 220 225

Thr Pro Leu Gln Asn Tyr Ser Asn Trp Asn Glu Gly Glu Pro Ser
230 235 240

Asp Pro Tyr Gly His Glu Asp Cys Val Glu Met Leu Ser Ser Gly
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Arg Trp Asn Asp Thr Glu Cys His Leu Thr Met Tyr Phe Val Cys
260 265 270

Glu Phe Ile Lys Lys Lys Lys
275

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<211> 2747
<212> DNA
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cccgcccttaa cttcctccgc ggggcccagc caccttcggg agtcgggggtt 150

gccacactgc aaactctccg cttcttgcac ctgccacccc tgagccagcg 200

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aagcaacccg tgccttgatg gtgggtggca tctcctggg agtgatagca 500

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 <212> PRT
 <213> Homo Sapien

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 Arg Ile Tyr Ser Tyr Ala Gly Asp Asn Ile Val Thr Ala Gln Ala
 35 40 45
 Met Tyr Glu Gly Leu Trp Met Ser Cys Val Ser Gln Ser Thr Gly
 50 55 60
 Gln Ile Gln Cys Lys Val Phe Asp Ser Leu Leu Asn Leu Ser Ser
 65 70 75
 Thr Leu Gln Ala Thr Arg Ala Leu Met Val Val Gly Ile Leu Leu
 80 85 90
 Gly Val Ile Ala Ile Phe Val Ala Thr Val Gly Met Lys Cys Met
 95 100 105
 Lys Cys Leu Glu Asp Asp Glu Val Gln Lys Met Arg Met Ala Val
 110 115 120
 Ile Gly Gly Ala Ile Phe Leu Leu Ala Gly Leu Ala Ile Leu Val
 125 130 135

Ala	Thr	Ala	Trp	Tyr	Gly	Asn	Arg	Ile	Val	Gln	Glu	Phe	Tyr	Asp
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Pro	Met	Thr	Pro	Val	Asn	Ala	Arg	Tyr	Glu	Phe	Gly	Gln	Ala	Leu
				155					160					165
Phe	Thr	Gly	Trp	Ala	Ala	Ala	Ser	Leu	Cys	Leu	Leu	Gly	Gly	Ala
				170					175					180
Leu	Leu	Cys	Cys	Ser	Cys	Pro	Arg	Lys	Thr	Thr	Ser	Tyr	Pro	Thr
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Pro	Arg	Pro	Tyr	Pro	Lys	Pro	Ala	Pro	Ser	Ser	Gly	Lys	Asp	Tyr
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Val

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 <212> DNA
 <213> Homo Sapien

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<212> PRT
<213> Homo Sapien

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35 40 45
Ser Asn Glu Ala Thr Asn Ile Thr Pro Lys His Asn Met Lys Ala
50 55 60
Phe Leu Asp Glu Leu Lys Ala Glu Asn Ile Lys Lys Phe Leu His
65 70 75
Asn Phe Thr Gln Ile Pro His Leu Ala Gly Thr Glu Gln Asn Phe
80 85 90
Gln Leu Ala Lys Gln Ile Gln Ser Gln Trp Lys Glu Phe Gly Leu
95 100 105
Asp Ser Val Glu Leu Ala His Tyr Asp Val Leu Leu Ser Tyr Pro
110 115 120
Asn Lys Thr His Pro Asn Tyr Ile Ser Ile Ile Asn Glu Asp Gly
125 130 135
Asn Glu Ile Phe Asn Thr Ser Leu Phe Glu Pro Pro Pro Pro Gly
140 145 150
Tyr Glu Asn Val Ser Asp Ile Val Pro Pro Phe Ser Ala Phe Ser
155 160 165
Pro Gln Gly Met Pro Glu Gly Asp Leu Val Tyr Val Asn Tyr Ala
170 175 180
Arg Thr Glu Asp Phe Phe Lys Leu Glu Arg Asp Met Lys Ile Asn
185 190 195
Cys Ser Gly Lys Ile Val Ile Ala Arg Tyr Gly Lys Val Phe Arg

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Gly Asn Lys Val	Lys Asn Ala Gln Leu	Ala Gly Ala Lys Gly Val			
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Ile Leu Tyr Ser	Asp Pro Ala Asp Tyr	Phe Ala Pro Gly Val Lys			
	230		235		240
Ser Tyr Pro Asp	Gly Trp Asn Leu Pro	Gly Gly Gly Val Gln Arg			
	245		250		255
Gly Asn Ile Leu	Asn Leu Asn Gly Ala	Gly Asp Pro Leu Thr Pro			
	260		265		270
Gly Tyr Pro Ala	Asn Glu Tyr Ala Tyr	Arg Arg Gly Ile Ala Glu			
	275		280		285
Ala Val Gly Leu	Pro Ser Ile Pro Val	His Pro Ile Gly Tyr Tyr			
	290		295		300
Asp Ala Gln Lys	Leu Leu Glu Lys Met	Gly Gly Ser Ala Pro Pro			
	305		310		315
Asp Ser Ser Trp	Arg Gly Ser Leu Lys	Val Pro Tyr Asn Val Gly			
	320		325		330
Pro Gly Phe Thr	Gly Asn Phe Ser Thr	Gln Lys Val Lys Met His			
	335		340		345
Ile His Ser Thr	Asn Glu Val Thr Arg	Ile Tyr Asn Val Ile Gly			
	350		355		360
Thr Leu Arg Gly	Ala Val Glu Pro Asp	Arg Tyr Val Ile Leu Gly			
	365		370		375
Gly His Arg Asp	Ser Trp Val Phe Gly	Gly Ile Asp Pro Gln Ser			
	380		385		390
Gly Ala Ala Val	Val His Glu Ile Val	Arg Ser Phe Gly Thr Leu			
	395		400		405
Lys Lys Glu Gly	Trp Arg Pro Arg Arg	Thr Ile Leu Phe Ala Ser			
	410		415		420
Trp Asp Ala Glu	Glu Phe Gly Leu Leu	Gly Ser Thr Glu Trp Ala			
	425		430		435
Glu Glu Asn Ser	Arg Leu Leu Gln Glu	Arg Gly Val Ala Tyr Ile			
	440		445		450
Asn Ala Asp Ser	Ser Ile Glu Gly Asn	Tyr Thr Leu Arg Val Asp			
	455		460		465
Cys Thr Pro Leu	Met Tyr Ser Leu Val	His Asn Leu Thr Lys Glu			
	470		475		480
Leu Lys Ser Pro	Asp Glu Gly Phe Glu	Gly Lys Ser Leu Tyr Glu			
	485		490		495

Ser	Trp	Thr	Lys	Lys	Ser	Pro	Ser	Pro	Glu	Phe	Ser	Gly	Met	Pro	
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				515					520					525	
Gln	Arg	Leu	Gly	Ile	Ala	Ser	Gly	Arg	Ala	Arg	Tyr	Thr	Lys	Asn	
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Trp	Glu	Thr	Asn	Lys	Phe	Ser	Gly	Tyr	Pro	Leu	Tyr	His	Ser	Val	
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Tyr	Glu	Thr	Tyr	Glu	Leu	Val	Glu	Lys	Phe	Tyr	Asp	Pro	Met	Phe	
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Lys	Tyr	His	Leu	Thr	Val	Ala	Gln	Val	Arg	Gly	Gly	Met	Val	Phe	
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Glu	Leu	Ala	Asn	Ser	Ile	Val	Leu	Pro	Phe	Asp	Cys	Arg	Asp	Tyr	
				590					595					600	
Ala	Val	Val	Leu	Arg	Lys	Tyr	Ala	Asp	Lys	Ile	Tyr	Ser	Ile	Ser	
				605					610					615	
Met	Lys	His	Pro	Gln	Glu	Met	Lys	Thr	Tyr	Ser	Val	Ser	Phe	Asp	
				620					625					630	
Ser	Leu	Phe	Ser	Ala	Val	Lys	Asn	Phe	Thr	Glu	Ile	Ala	Ser	Lys	
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Phe	Ser	Glu	Arg	Leu	Gln	Asp	Phe	Asp	Lys	Ser	Asn	Pro	Ile	Val	
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Leu	Arg	Met	Met	Asn	Asp	Gln	Leu	Met	Phe	Leu	Glu	Arg	Ala	Phe	
				665					670					675	
Ile	Asp	Pro	Leu	Gly	Leu	Pro	Asp	Arg	Pro	Phe	Tyr	Arg	His	Val	
				680					685					690	
Ile	Tyr	Ala	Pro	Ser	Ser	His	Asn	Lys	Tyr	Ala	Gly	Glu	Ser	Phe	
				695					700					705	
Pro	Gly	Ile	Tyr	Asp	Ala	Leu	Phe	Asp	Ile	Glu	Ser	Lys	Val	Asp	
				710					715					720	
Pro	Ser	Lys	Ala	Trp	Gly	Glu	Val	Lys	Arg	Gln	Ile	Tyr	Val	Ala	
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 <211> 2857
 <212> DNA
 <213> Homo Sapien

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caacagaaaa ctctcaaaca aagaaagtca agcagccagt gcgatctcat 150
ttgagagtga agcgtggctg ggtgtggaac caattttttg taccagagga 200
aatgaatacg actagtcac acatcggcca gctaagatct gatttagaca 250
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 <211> 772

<212> PRT
 <213> Homo Sapien

<400> 106

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				20					25					30	
Val	Lys	Gln	Pro	Val	Arg	Ser	His	Leu	Arg	Val	Lys	Arg	Gly	Trp	
				35					40					45	
Val	Trp	Asn	Gln	Phe	Phe	Val	Pro	Glu	Glu	Met	Asn	Thr	Thr	Ser	
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His	His	Ile	Gly	Gln	Leu	Arg	Ser	Asp	Leu	Asp	Asn	Gly	Asn	Asn	
				65					70					75	
Ser	Phe	Gln	Tyr	Lys	Leu	Leu	Gly	Ala	Gly	Ala	Gly	Ser	Thr	Phe	
				80					85					90	
Ile	Ile	Asp	Glu	Arg	Thr	Gly	Asp	Ile	Tyr	Ala	Ile	Gln	Lys	Leu	
				95					100					105	
Asp	Arg	Glu	Glu	Arg	Ser	Leu	Tyr	Ile	Leu	Arg	Ala	Gln	Val	Ile	
				110					115					120	
Asp	Ile	Ala	Thr	Gly	Arg	Ala	Val	Glu	Pro	Glu	Ser	Glu	Phe	Val	
				125					130					135	
Ile	Lys	Val	Ser	Asp	Ile	Asn	Asp	Asn	Glu	Pro	Lys	Phe	Leu	Asp	
				140					145					150	
Glu	Pro	Tyr	Glu	Ala	Ile	Val	Pro	Glu	Met	Ser	Pro	Glu	Gly	Thr	
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Leu	Val	Ile	Gln	Val	Thr	Ala	Ser	Asp	Ala	Asp	Asp	Pro	Ser	Ser	
				170					175					180	
Gly	Asn	Asn	Ala	Arg	Leu	Leu	Tyr	Ser	Leu	Leu	Gln	Gly	Gln	Pro	
				185					190					195	
Tyr	Phe	Ser	Val	Glu	Pro	Thr	Thr	Gly	Val	Ile	Arg	Ile	Ser	Ser	
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Lys	Met	Asp	Arg	Glu	Leu	Gln	Asp	Glu	Tyr	Trp	Val	Ile	Ile	Gln	
				215					220					225	
Ala	Lys	Asp	Met	Ile	Gly	Gln	Pro	Gly	Ala	Leu	Ser	Gly	Thr	Thr	
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Ser	Val	Leu	Ile	Lys	Leu	Ser	Asp	Val	Asn	Asp	Asn	Lys	Pro	Ile	
				245					250					255	
Phe	Lys	Glu	Ser	Leu	Tyr	Arg	Leu	Thr	Val	Ser	Glu	Ser	Ala	Pro	
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Gln Thr Phe Asp	Ile Ile Thr Asn His	Glu Thr Gln Glu Gly	Ile
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Val Ile Leu Lys	Lys Lys Val Asp Phe	Glu His Gln Asn His	Tyr
	320	325	330
Gly Ile Arg Ala	Lys Val Lys Asn His	His Val Pro Glu Gln	Leu
	335	340	345
Met Lys Tyr His	Thr Glu Ala Ser Thr	Thr Phe Ile Lys Ile	Gln
	350	355	360
Val Glu Asp Val	Asp Glu Pro Pro Leu	Phe Leu Leu Pro Tyr	Tyr
	365	370	375
Val Phe Glu Val	Phe Glu Glu Thr Pro	Gln Gly Ser Phe Val	Gly
	380	385	390
Val Val Ser Ala	Thr Asp Pro Asp Asn	Arg Lys Ser Pro Ile	Arg
	395	400	405
Tyr Ser Ile Thr	Arg Ser Lys Val Phe	Asn Ile Asn Asp Asn	Gly
	410	415	420
Thr Ile Thr Thr	Ser Asn Ser Leu Asp	Arg Glu Ile Ser Ala	Trp
	425	430	435
Tyr Asn Leu Ser	Ile Thr Ala Thr Glu	Lys Tyr Asn Ile Glu	Gln
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Ile Ser Ser Ile	Pro Leu Tyr Val Gln	Val Leu Asn Ile Asn	Asp
	455	460	465
His Ala Pro Glu	Phe Ser Gln Tyr Tyr	Glu Thr Tyr Val Cys	Glu
	470	475	480
Asn Ala Gly Ser	Gly Gln Val Ile Gln	Thr Ile Ser Ala Val	Asp
	485	490	495
Arg Asp Glu Ser	Ile Glu Glu His His	Phe Tyr Phe Asn Leu	Ser
	500	505	510
Val Glu Asp Thr	Asn Asn Ser Ser Phe	Thr Ile Ile Asp Asn	Gln
	515	520	525
Asp Asn Thr Ala	Val Ile Leu Thr Asn	Arg Thr Gly Phe Asn	Leu
	530	535	540
Gln Glu Glu Pro	Val Phe Tyr Ile Ser	Ile Leu Ile Ala Asp	Asn
	545	550	555
Gly Ile Pro Ser	Leu Thr Ser Thr Asn	Thr Leu Thr Ile His	Val

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Ser Leu Asn Ser Trp Asp Gly Ser Lys Arg Gln Cys Trp Gln Leu
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Gly Ser Asn Leu Leu Lys Ile Asp Ser Ser Asn Glu Leu Gly Phe
110 115 120
Ile Val Lys Gln Val Ser Ser Gln Pro Asp Asn Ser Phe Trp Ile
125 130 135
Gly Leu Ser Arg Pro Gln Thr Glu Val Pro Trp Leu Trp Glu Asp
140 145 150
Gly Ser Thr Phe Ser Ser Asn Leu Phe Gln Ile Arg Thr Thr Ala
155 160 165
Thr Gln Glu Asn Pro Ser Pro Asn Cys Val Trp Ile His Val Ser
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<211> 2819
<212> DNA
<213> Homo Sapien

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<210> 110

<211> 438

<212> PRT

<213> Homo Sapien

<400> 110

Met	Tyr	Leu	Ser	Arg	Ser	Leu	Ser	Ile	His	Ala	Leu	Trp	Val	Thr
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Val	Ser	Ser	Val	Met	Gln	Pro	Tyr	Pro	Leu	Val	Trp	Gly	His	Tyr
				20					25					30
Asp	Leu	Cys	Lys	Thr	Gln	Ile	Tyr	Thr	Glu	Glu	Gly	Lys	Val	Trp
				35					40					45
Asp	Tyr	Met	Ala	Cys	Gln	Pro	Glu	Ser	Thr	Asp	Met	Thr	Lys	Tyr
				50					55					60
Leu	Lys	Val	Lys	Leu	Asp	Pro	Pro	Asp	Ile	Thr	Cys	Gly	Asp	Pro
				65					70					75
Pro	Glu	Thr	Phe	Cys	Ala	Met	Gly	Asn	Pro	Tyr	Met	Cys	Asn	Asn
				80					85					90
Glu	Cys	Asp	Ala	Ser	Thr	Pro	Glu	Leu	Ala	His	Pro	Pro	Glu	Leu
				95					100					105
Met	Phe	Asp	Phe	Glu	Gly	Arg	His	Pro	Ser	Thr	Phe	Trp	Gln	Ser
				110					115					120

209

410

415

420

Pro Ala Leu Leu Leu Leu Thr Thr Leu Leu Gly Thr Ala Ser Pro
425 430 435

Leu Val Phe

<210> 111

<211> 2285

<212> DNA

<213> Homo Sapien

<400> 111

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taaagcgggc gcagcattaa cgcttccgc cccggtgacc tctcaggggt 200
ctccccgcc aaggtgctcc gccgctaagg aacatggcga aggtggagca 250
ggctctgagc ctcgagccgc agcacgagct caaattccga ggtcccttca 300
ccgatgttgt caccaccaac ctaaagcttg gcaacccgac agaccgaaat 350
gtgtgtttta aggtgaagac tacagcacca cgtaggtact gtgtgaggcc 400
caacagcgga atcatcgatg caggggcctc aattaatgta tctgtgatgt 450
tacagccttt cgattatgat cccaatgaga aaagtaaaca caagtttatg 500
gttcagtcta tgtttgctcc aactgacact tcagatatgg aagcagtatg 550
gaaggaggca aaaccggaag accttatgga ttcaaaactt agatgtgtgt 600
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aagattgcct tgtagaggta gcatgcacag gatggtaaata tggattggtg 1000
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aattaatgta tgatgacatc tcacaggtct tgcctttaa ttaccctcc 1100

ctgcacacac atacacagat acacacacac aaatataatg taacgatctt 1150
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<210> 112

<211> 243

<212> PRT

<213> Homo Sapien

<400> 112

Met	Ala	Lys	Val	Glu	Gln	Val	Leu	Ser	Leu	Glu	Pro	Gln	His	Glu
1				5			10						15	

Leu Lys Phe Arg Gly Pro Phe Thr Asp Val Val Thr Thr Asn Leu

	20	25	30
Lys Leu Gly Asn Pro Thr Asp Arg Asn Val Cys Phe Lys Val Lys	35	40	45
Thr Thr Ala Pro Arg Arg Tyr Cys Val Arg Pro Asn Ser Gly Ile	50	55	60
Ile Asp Ala Gly Ala Ser Ile Asn Val Ser Val Met Leu Gln Pro	65	70	75
Phe Asp Tyr Asp Pro Asn Glu Lys Ser Lys His Lys Phe Met Val	80	85	90
Gln Ser Met Phe Ala Pro Thr Asp Thr Ser Asp Met Glu Ala Val	95	100	105
Trp Lys Glu Ala Lys Pro Glu Asp Leu Met Asp Ser Lys Leu Arg	110	115	120
Cys Val Phe Glu Leu Pro Ala Glu Asn Asp Lys Pro His Asp Val	125	130	135
Glu Ile Asn Lys Ile Ile Ser Thr Thr Ala Ser Lys Thr Glu Thr	140	145	150
Pro Ile Val Ser Lys Ser Leu Ser Ser Ser Leu Asp Asp Thr Glu	155	160	165
Val Lys Lys Val Met Glu Glu Cys Lys Arg Leu Gln Gly Glu Val	170	175	180
Gln Arg Leu Arg Glu Glu Asn Lys Gln Phe Lys Glu Glu Asp Gly	185	190	195
Leu Arg Met Arg Lys Thr Val Gln Ser Asn Ser Pro Ile Ser Ala	200	205	210
Leu Ala Pro Thr Gly Lys Glu Glu Gly Leu Ser Thr Arg Leu Leu	215	220	225
Ala Leu Val Val Leu Phe Phe Ile Val Gly Val Ile Ile Gly Lys	230	235	240
Ile Ala Leu			

<210> 113

<211> 1493

<212> DNA

<213> Homo Sapien

<400> 113

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ccgggcgagg tgtcctcatg acttctcttg tggaccatgt ccgtgatctt 150

ttttgctgc gtggtacggg taagggatgg actgcccctc tcagcctcta 200
 ctgattttta ccacacccaa gatttttttg aatggaggag acggctcaag 250
 agtttagcct tgcgactggc ccagtatcca ggctgaggtt ctgcagaagg 300
 ttgtgacttt agtatacatt tttcttcttt cggggacgtg gcctgcatgg 350
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 ggaggacaca gatgtggcaa atgggggtgat gaatggtcac acaccgatgc 650
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 aggagtccac cttgcagaac attctttaca ggatccaagg agctggttct 800
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 aaatctaaag tgtttattaa aaaaaaaaaa aaaaaaaaaa aag 1493

<210> 114
 <211> 228
 <212> PRT
 <213> Homo Sapien

<400> 114

Met	Ser	Val	Ile	Phe	Phe	Ala	Cys	Val	Val	Arg	Val	Arg	Asp	Gly	
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Leu	Pro	Leu	Ser	Ala	Ser	Thr	Asp	Phe	Tyr	His	Thr	Gln	Asp	Phe	
				20					25					30	
Leu	Glu	Trp	Arg	Arg	Arg	Leu	Lys	Ser	Leu	Ala	Leu	Arg	Leu	Ala	
				35					40					45	
Gln	Tyr	Pro	Gly	Arg	Gly	Ser	Ala	Glu	Gly	Cys	Asp	Phe	Ser	Ile	
				50					55					60	
His	Phe	Ser	Ser	Phe	Gly	Asp	Val	Ala	Cys	Met	Ala	Ile	Cys	Ser	
				65					70					75	
Cys	Gln	Cys	Pro	Ala	Ala	Met	Ala	Phe	Cys	Phe	Leu	Glu	Thr	Leu	
				80					85					90	
Trp	Trp	Glu	Phe	Thr	Ala	Ser	Tyr	Asp	Thr	Thr	Cys	Ile	Gly	Leu	
				95					100					105	
Ala	Ser	Arg	Pro	Tyr	Ala	Phe	Leu	Glu	Phe	Asp	Ser	Ile	Ile	Gln	
				110					115					120	
Lys	Val	Lys	Trp	His	Phe	Asn	Tyr	Val	Ser	Ser	Ser	Gln	Met	Glu	
				125					130					135	
Cys	Ser	Leu	Glu	Lys	Ile	Gln	Glu	Glu	Leu	Lys	Leu	Gln	Pro	Pro	
				140					145					150	
Ala	Val	Leu	Thr	Leu	Glu	Asp	Thr	Asp	Val	Ala	Asn	Gly	Val	Met	
				155					160					165	
Asn	Gly	His	Thr	Pro	Met	His	Leu	Glu	Pro	Ala	Pro	Asn	Phe	Arg	
				170					175					180	
Met	Glu	Pro	Val	Thr	Ala	Leu	Gly	Ile	Leu	Ser	Leu	Ile	Leu	Asn	
				185					190					195	
Ile	Met	Cys	Ala	Ala	Leu	Asn	Leu	Ile	Arg	Gly	Val	His	Leu	Ala	
				200					205					210	
Glu	His	Ser	Leu	Gln	Asp	Pro	Arg	Ser	Trp	Phe	Cys	Trp	Leu	Asp	
				215					220					225	

Gln Thr Ser

<210> 115

<211> 2300

<212> DNA

<213> Homo Sapien

<400> 115

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ccctttaaaa cgaggcgggt ggtgcctgcc cctttaaggg cggggcggtcc 150
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<210> 116

<211> 489

<212> PRT

<213> Homo Sapien

<400> 116

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Phe	His	Glu	Arg	Ile	Arg	Glu	Cys	Ile	Ile	Ser	Thr	Leu	Leu	Phe
				20					25					30
Ala	Thr	Leu	Tyr	Ile	Leu	Cys	His	Ile	Phe	Leu	Thr	Arg	Phe	Lys
				35					40					45
Lys	Pro	Ala	Glu	Phe	Thr	Thr	Val	Asp	Asp	Glu	Asp	Ala	Thr	Val
				50					55					60
Asn	Lys	Ile	Ala	Leu	Glu	Leu	Cys	Thr	Phe	Thr	Leu	Ala	Ile	Ala
				65					70					75
Leu	Gly	Ala	Val	Leu	Leu	Leu	Pro	Phe	Ser	Ile	Ile	Ser	Asn	Glu
				80					85					90
Val	Leu	Leu	Ser	Leu	Pro	Arg	Asn	Tyr	Tyr	Ile	Gln	Trp	Leu	Asn
				95					100					105
Gly	Ser	Leu	Ile	His	Gly	Leu	Trp	Asn	Leu	Val	Phe	Leu	Phe	Pro

Asn	Leu	Ser	Leu	Ile	Phe	Leu	Met	Pro	Phe	Ala	Tyr	Phe	Phe	Thr	110	115	120
				125					130					135			
Glu	Ser	Glu	Gly	Phe	Ala	Gly	Ser	Arg	Lys	Gly	Val	Leu	Gly	Arg			
				140					145					150			
Val	Tyr	Glu	Thr	Val	Val	Met	Leu	Met	Leu	Leu	Thr	Leu	Leu	Val			
				155					160					165			
Leu	Gly	Met	Val	Trp	Val	Ala	Ser	Ala	Ile	Val	Asp	Lys	Asn	Lys			
				170					175					180			
Ala	Asn	Arg	Glu	Ser	Leu	Tyr	Asp	Phe	Trp	Glu	Tyr	Tyr	Leu	Pro			
				185					190					195			
Tyr	Leu	Tyr	Ser	Cys	Ile	Ser	Phe	Leu	Gly	Val	Leu	Leu	Leu	Leu			
				200					205					210			
Val	Cys	Thr	Pro	Leu	Gly	Leu	Ala	Arg	Met	Phe	Ser	Val	Thr	Gly			
				215					220					225			
Lys	Leu	Leu	Val	Lys	Pro	Arg	Leu	Leu	Glu	Asp	Leu	Glu	Glu	Gln			
				230					235					240			
Leu	Tyr	Cys	Ser	Ala	Phe	Glu	Glu	Ala	Ala	Leu	Thr	Arg	Arg	Ile			
				245					250					255			
Cys	Asn	Pro	Thr	Ser	Cys	Trp	Leu	Pro	Leu	Asp	Met	Glu	Leu	Leu			
				260					265					270			
His	Arg	Gln	Val	Leu	Ala	Leu	Gln	Thr	Gln	Arg	Val	Leu	Leu	Glu			
				275					280					285			
Lys	Arg	Arg	Lys	Ala	Ser	Ala	Trp	Gln	Arg	Asn	Leu	Gly	Tyr	Pro			
				290					295					300			
Leu	Ala	Met	Leu	Cys	Leu	Leu	Val	Leu	Thr	Gly	Leu	Ser	Val	Leu			
				305					310					315			
Ile	Val	Ala	Ile	His	Ile	Leu	Glu	Leu	Leu	Ile	Asp	Glu	Ala	Ala			
				320					325					330			
Met	Pro	Arg	Gly	Met	Gln	Gly	Thr	Ser	Leu	Gly	Gln	Val	Ser	Phe			
				335					340					345			
Ser	Lys	Leu	Gly	Ser	Phe	Gly	Ala	Val	Ile	Gln	Val	Val	Leu	Ile			
				350					355					360			
Phe	Tyr	Leu	Met	Val	Ser	Ser	Val	Val	Gly	Phe	Tyr	Ser	Ser	Pro			
				365					370					375			
Leu	Phe	Arg	Ser	Leu	Arg	Pro	Arg	Trp	His	Asp	Thr	Ala	Met	Thr			
				380					385					390			
Gln	Ile	Ile	Gly	Asn	Cys	Val	Cys	Leu	Leu	Val	Leu	Ser	Ser	Ala			
				395					400					405			

Leu Pro Val Phe Ser Arg Thr Leu Gly Leu Thr Arg Phe Asp Leu
 410 415 420
 Leu Gly Asp Phe Gly Arg Phe Asn Trp Leu Gly Asn Phe Tyr Ile
 425 430 435
 Val Phe Leu Tyr Asn Ala Ala Phe Ala Gly Leu Thr Thr Leu Cys
 440 445 450
 Leu Val Lys Thr Phe Thr Ala Ala Val Arg Ala Glu Leu Ile Arg
 455 460 465
 Ala Phe Gly Leu Asp Arg Leu Pro Leu Pro Val Ser Gly Phe Pro
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 Gln Ala Ser Arg Lys Thr Gln His Gln
 485

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 <211> 2764
 <212> DNA
 <213> Homo Sapien

<400> 117
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 ggagattctg gatacgagtg caggagtcag tgatggtgcc ggagggcctg 150
 tgcattctctg tgccctgctc tttctcctac ccccgacaag actggacagg 200
 gtctacccca gcttatggct actggttcaa agcagtgact gagacaacca 250
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 cttggtgatc agagacgcgc agatgcagga tgagtcacag tacttctttc 400
 ggggtggagag aggaagctat gtgacatata atttcatgaa cgatgggttc 450
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 agaggaccgt ccgactccgt gtggcctatg ccccagaga ccttgttatc 600
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 <211> 544
 <212> PRT
 <213> Homo Sapien

<400> 118
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 35 40 45
 Pro Arg Gln Asp Trp Thr Gly Ser Thr Pro Ala Tyr Gly Tyr Trp
 50 55 60
 Phe Lys Ala Val Thr Glu Thr Thr Lys Gly Ala Pro Val Ala Thr
 65 70 75
 Asn His Gln Ser Arg Glu Val Glu Met Ser Thr Arg Gly Arg Phe
 80 85 90
 Gln Leu Thr Gly Asp Pro Ala Lys Gly Asn Cys Ser Leu Val Ile
 95 100 105
 Arg Asp Ala Gln Met Gln Asp Glu Ser Gln Tyr Phe Phe Arg Val
 110 115 120
 Glu Arg Gly Ser Tyr Val Thr Tyr Asn Phe Met Asn Asp Gly Phe
 125 130 135
 Phe Leu Lys Val Thr Val Leu Ser Phe Thr Pro Arg Pro Gln Asp
 140 145 150
 His Asn Thr Asp Leu Thr Cys His Val Asp Phe Ser Arg Lys Gly
 155 160 165

Val Ser Ala Gln Arg Thr Val Arg Leu Arg Val Ala Tyr Ala Pro	170	175	180
Arg Asp Leu Val Ile Ser Ile Ser Arg Asp Asn Thr Pro Ala Leu	185	190	195
Glu Pro Gln Pro Gln Gly Asn Val Pro Tyr Leu Glu Ala Gln Lys	200	205	210
Gly Gln Phe Leu Arg Leu Leu Cys Ala Ala Asp Ser Gln Pro Pro	215	220	225
Ala Thr Leu Ser Trp Val Leu Gln Asn Arg Val Leu Ser Ser Ser	230	235	240
His Pro Trp Gly Pro Arg Pro Leu Gly Leu Glu Leu Pro Gly Val	245	250	255
Lys Ala Gly Asp Ser Gly Arg Tyr Thr Cys Arg Ala Glu Asn Arg	260	265	270
Leu Gly Ser Gln Gln Arg Ala Leu Asp Leu Ser Val Gln Tyr Pro	275	280	285
Pro Glu Asn Leu Arg Val Met Val Ser Gln Ala Asn Arg Thr Val	290	295	300
Leu Glu Asn Leu Gly Asn Gly Thr Ser Leu Pro Val Leu Glu Gly	305	310	315
Gln Ser Leu Cys Leu Val Cys Val Thr His Ser Ser Pro Pro Ala	320	325	330
Arg Leu Ser Trp Thr Gln Arg Gly Gln Val Leu Ser Pro Ser Gln	335	340	345
Pro Ser Asp Pro Gly Val Leu Glu Leu Pro Arg Val Gln Val Glu	350	355	360
His Glu Gly Glu Phe Thr Cys His Ala Arg His Pro Leu Gly Ser	365	370	375
Gln His Val Ser Leu Ser Leu Ser Val His Tyr Lys Lys Gly Leu	380	385	390
Ile Ser Thr Ala Phe Ser Asn Gly Ala Phe Leu Gly Ile Gly Ile	395	400	405
Thr Ala Leu Leu Phe Leu Cys Leu Ala Leu Ile Ile Met Lys Ile	410	415	420
Leu Pro Lys Arg Arg Thr Gln Thr Glu Thr Pro Arg Pro Arg Phe	425	430	435
Ser Arg His Ser Thr Ile Leu Asp Tyr Ile Asn Val Val Pro Thr	440	445	450
Ala Gly Pro Leu Ala Gln Lys Arg Asn Gln Lys Ala Thr Pro Asn			

	455		460		465
Ser Pro Arg Thr	Pro Pro Pro Pro Gly	Ala Pro Ser Pro Glu Ser			
	470	475		480	
Lys Lys Asn Gln	Lys Lys Gln Tyr Gln	Leu Pro Ser Phe Pro Glu			
	485	490		495	
Pro Lys Ser Ser	Thr Gln Ala Pro Glu	Ser Gln Glu Ser Gln Glu			
	500	505		510	
Glu Leu His Tyr	Ala Thr Leu Asn Phe	Pro Gly Val Arg Pro Arg			
	515	520		525	
Pro Glu Ala Arg	Met Pro Lys Gly Thr	Gln Ala Asp Tyr Ala Glu			
	530	535		540	
Val Lys Phe Gln					

<210> 119
 <211> 3951
 <212> DNA
 <213> Homo Sapien

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 ttctcacggg ctgtgcctt caatctggac gtgatgggtg ccttgcgcaa 150
 ggagggcgag ccaggcagcc tcttcggctt ctctgtggcc ctgcaccggc 200
 agttgcagcc ccgaccccag agctgggtgc tgggtgggtgc tccccaggcc 250
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 ttcgtctatt tattaataaaa tatttgagaa caaaaaaaaaa aaaaaaaaaa 3950
 a 3951

<210> 120
 <211> 1141
 <212> PRT
 <213> Homo Sapien

<400> 120
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 Ala Val Ala Phe Asn Leu Asp Val Met Gly Ala Leu Arg Lys Glu
 35 40 45
 Gly Glu Pro Gly Ser Leu Phe Gly Phe Ser Val Ala Leu His Arg
 50 55 60
 Gln Leu Gln Pro Arg Pro Gln Ser Trp Leu Leu Val Gly Ala Pro
 65 70 75
 Gln Ala Leu Ala Leu Pro Gly Gln Gln Ala Asn Arg Thr Gly Gly
 80 85 90
 Leu Phe Ala Cys Pro Leu Ser Leu Glu Glu Thr Asp Cys Tyr Arg
 95 100 105
 Val Asp Ile Asp Gln Gly Ala Asp Met Gln Lys Glu Ser Lys Glu
 110 115 120
 Asn Gln Trp Leu Gly Val Ser Val Arg Ser Gln Gly Pro Gly Gly
 125 130 135
 Lys Ile Val Thr Cys Ala His Arg Tyr Glu Ala Arg Gln Arg Val
 140 145 150
 Asp Gln Ile Leu Glu Thr Arg Asp Met Ile Gly Arg Cys Phe Val
 155 160 165
 Leu Ser Gln Asp Leu Ala Ile Arg Asp Glu Leu Asp Gly Gly Glu
 170 175 180
 Trp Lys Phe Cys Glu Gly Arg Pro Gln Gly His Glu Gln Phe Gly
 185 190 195
 Phe Cys Gln Gln Gly Thr Ala Ala Ala Phe Ser Pro Asp Ser His

Tyr Leu Leu Phe Gly Ala Pro Gly Thr	Tyr Asn Trp Lys Gly Thr	
215	220	225
Ala Arg Val Glu Leu Cys Ala Gln Gly	Ser Ala Asp Leu Ala His	
230	235	240
Leu Asp Asp Gly Pro Tyr Glu Ala Gly	Gly Glu Lys Glu Gln Asp	
245	250	255
Pro Arg Leu Ile Pro Val Pro Ala Asn	Ser Tyr Phe Gly Phe Ser	
260	265	270
Ile Asp Ser Gly Lys Gly Leu Val Arg	Ala Glu Glu Leu Ser Phe	
275	280	285
Val Ala Gly Ala Pro Arg Ala Asn His	Lys Gly Ala Val Val Ile	
290	295	300
Leu Arg Lys Asp Ser Ala Ser Arg Leu	Val Pro Glu Val Met Leu	
305	310	315
Ser Gly Glu Arg Leu Thr Ser Gly Phe	Gly Tyr Ser Leu Ala Val	
320	325	330
Ala Asp Leu Asn Ser Asp Gly Trp Pro	Asp Leu Ile Val Gly Ala	
335	340	345
Pro Tyr Phe Phe Glu Arg Gln Glu Glu	Leu Gly Gly Ala Val Tyr	
350	355	360
Val Tyr Leu Asn Gln Gly Gly His Trp	Ala Gly Ile Ser Pro Leu	
365	370	375
Arg Leu Cys Gly Ser Pro Asp Ser Met	Phe Gly Ile Ser Leu Ala	
380	385	390
Val Leu Gly Asp Leu Asn Gln Asp Gly	Phe Pro Asp Ile Ala Val	
395	400	405
Gly Ala Pro Phe Asp Gly Asp Gly Lys	Val Phe Ile Tyr His Gly	
410	415	420
Ser Ser Leu Gly Val Val Ala Lys Pro	Ser Gln Val Leu Glu Gly	
425	430	435
Glu Ala Val Gly Ile Lys Ser Phe Gly	Tyr Ser Leu Ser Gly Ser	
440	445	450
Leu Asp Met Asp Gly Asn Gln Tyr Pro	Asp Leu Leu Val Gly Ser	
455	460	465
Leu Ala Asp Thr Ala Val Leu Phe Arg	Ala Arg Pro Ile Leu His	
470	475	480
Val Ser His Glu Val Ser Ile Ala Pro	Arg Ser Ile Asp Leu Glu	
485	490	495

785	790	795
Leu His Pro Val Ser Ala Arg Ala Arg Val Phe Ile Glu Leu Pro		
800	805	810
Leu Ser Ile Ala Gly Met Ala Ile Pro Gln Gln Leu Phe Phe Ser		
815	820	825
Gly Val Val Arg Gly Glu Arg Ala Met Gln Ser Glu Arg Asp Val		
830	835	840
Gly Ser Lys Val Lys Tyr Glu Val Thr Val Ser Asn Gln Gly Gln		
845	850	855
Ser Leu Arg Thr Leu Gly Ser Ala Phe Leu Asn Ile Met Trp Pro		
860	865	870
His Glu Ile Ala Asn Gly Lys Trp Leu Leu Tyr Pro Met Gln Val		
875	880	885
Glu Leu Glu Gly Gly Gln Gly Pro Gly Gln Lys Gly Leu Cys Ser		
890	895	900
Pro Arg Pro Asn Ile Leu His Leu Asp Val Asp Ser Arg Asp Arg		
905	910	915
Arg Arg Arg Glu Leu Glu Pro Pro Glu Gln Gln Glu Pro Gly Glu		
920	925	930
Arg Gln Glu Pro Ser Met Ser Trp Trp Pro Val Ser Ser Ala Glu		
935	940	945
Lys Lys Lys Asn Ile Thr Leu Asp Cys Ala Arg Gly Thr Ala Asn		
950	955	960
Cys Val Val Phe Ser Cys Pro Leu Tyr Ser Phe Asp Arg Ala Ala		
965	970	975
Val Leu His Val Trp Gly Arg Leu Trp Asn Ser Thr Phe Leu Glu		
980	985	990
Glu Tyr Ser Ala Val Lys Ser Leu Glu Val Ile Val Arg Ala Asn		
995	1000	1005
Ile Thr Val Lys Ser Ser Ile Lys Asn Leu Met Leu Arg Asp Ala		
1010	1015	1020
Ser Thr Val Ile Pro Val Met Val Tyr Leu Asp Pro Met Ala Val		
1025	1030	1035
Val Ala Glu Gly Val Pro Trp Trp Val Ile Leu Leu Ala Val Leu		
1040	1045	1050
Ala Gly Leu Leu Val Leu Ala Leu Leu Val Leu Leu Leu Trp Lys		
1055	1060	1065
Met Gly Phe Phe Lys Arg Ala Lys His Pro Glu Ala Thr Val Pro		
1070	1075	1080

Gln Tyr His Ala Val Lys Ile Pro Arg Glu Asp Arg Gln Gln Phe
1085 1090 1095

Lys Glu Glu Lys Thr Gly Thr Ile Leu Arg Asn Asn Trp Gly Ser
1100 1105 1110

Pro Arg Arg Glu Gly Pro Asp Ala His Pro Ile Leu Ala Ala Asp
1115 1120 1125

Gly His Pro Glu Leu Gly Pro Asp Gly His Pro Gly Pro Gly Thr
1130 1135 1140

Ala

<210> 121
<211> 1532
<212> DNA
<213> Homo Sapien

<400> 121
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ctcttcccca atttgccact tccagcagct ttagcccatg aggaggatgt 150
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 atacttatgt ttccctcaaa aaaaaaaaaa aa 1532

<210> 122

<211> 226

<212> PRT

<213> Homo Sapien

<400> 122

Met	Glu	Thr	Val	Val	Ile	Val	Ala	Ile	Gly	Val	Leu	Ala	Thr	Ile	1	5	10	15
Phe	Leu	Ala	Ser	Phe	Ala	Ala	Leu	Val	Leu	Val	Cys	Arg	Gln	Arg	20	25	30	
Tyr	Cys	Arg	Pro	Arg	Asp	Leu	Leu	Gln	Arg	Tyr	Asp	Ser	Lys	Pro	35	40	45	
Ile	Val	Asp	Leu	Ile	Gly	Ala	Met	Glu	Thr	Gln	Ser	Glu	Pro	Ser	50	55	60	
Glu	Leu	Glu	Leu	Asp	Asp	Val	Val	Ile	Thr	Asn	Pro	His	Ile	Glu	65	70	75	
Ala	Ile	Leu	Glu	Asn	Glu	Asp	Trp	Ile	Glu	Asp	Ala	Ser	Gly	Leu	80	85	90	
Met	Ser	His	Cys	Ile	Ala	Ile	Leu	Lys	Ile	Cys	His	Thr	Leu	Thr	95	100	105	
Glu	Lys	Leu	Val	Ala	Met	Thr	Met	Gly	Ser	Gly	Ala	Lys	Met	Lys	110	115	120	
Thr	Ser	Ala	Ser	Val	Ser	Asp	Ile	Ile	Val	Val	Ala	Lys	Arg	Ile	125	130	135	
Ser	Pro	Arg	Val	Asp	Asp	Val	Val	Lys	Ser	Met	Tyr	Pro	Pro	Leu				

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Asp Pro Lys Leu	Leu Asp Ala Arg Thr	Thr Ala Leu Leu Leu Ser			
	155		160		165
Val Ser His Leu	Val Leu Val Thr Arg	Asn Ala Cys His Leu Thr			
	170		175		180
Gly Gly Leu Asp	Trp Ile Asp Gln Ser	Leu Ser Ala Ala Glu Glu			
	185		190		195
His Leu Glu Val	Leu Arg Glu Ala Ala	Leu Ala Ser Glu Pro Asp			
	200		205		210
Lys Gly Leu Pro	Gly Pro Glu Gly Phe	Leu Gln Glu Gln Ser Ala			
	215		220		225
Ile					

<210> 123
 <211> 1410
 <212> DNA
 <213> Homo Sapien

<400> 123
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 gggcagcact gtccgcgcgt ccgcctccgt gctgcttctg ctgctgctcc 150
 tgcgcggggc cgagcagccc tgcggggcgc agctcacctt cgagctgccg 200
 gacaacgccca agcagtgtt ccacgaggag gtggagcagg gcgtaagtt 250
 ctccctggat taccaggtca tctactggagg ccactacgat gttgactgct 300
 atgtagagga ccccgagggg aacaccatct acagagaaac gaagaagcag 350
 tacgacagct tcacgtaccg ggctgaagtc aagggcgttt atcagttttg 400
 cttcagtaat gagttttcca ctttctctca caagaccgtc tactttgact 450
 ttcaagtggg cgatgagcct ccattctctc cagacatggg gaacagggtc 500
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 gaaaacgggtg attgactccc agacgcatta ccggctgcgc gaggcccagg 600
 accgggcccc agcggaagac cttaatagcc gagtctctta ctggtctgtt 650
 ggcgagacga ttgcctgtt cgtggtcagc ttcagtcagg tgctactgtt 700
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 agccccggca tctgtctcta gggccctca tgccccaggc tggagcagct 800

ctcctaggtc acagcctgct gggctgggtc gcgtagccca gggaggaggc 850
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 cttgcacctc agcagctgaa ggtctcagag accagtaatc agaaggcatc 950
 cgactgcatt aagtgtgcag cgctgaaaag acattttacaa ctaggccagg 1000
 gattagccac tgtgggaggg tggacaggca atggttcagt ggcttggtg 1050
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 ctctgtttca tgatgcatgg gtcatttgtc ttgggtgtcc tatcccatat 1150
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 gtacctgagg aaaccaggcc ctgggtgact ttgcagatct gctcacctc 1250
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 cccttggtga gctgtgtatt tctaggagg tagaaaactg tgggaaactg 1350
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 aaaaaaaaaa 1410

<210> 124
 <211> 217
 <212> PRT
 <213> Homo Sapien

<400> 124
 Met Gly Ser Thr Val Pro Arg Ser Ala Ser Val Leu Leu Leu Leu
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 Phe Glu Leu Pro Asp Asn Ala Lys Gln Cys Phe His Glu Glu Val
 35 40 45
 Glu Gln Gly Val Lys Phe Ser Leu Asp Tyr Gln Val Ile Thr Gly
 50 55 60
 Gly His Tyr Asp Val Asp Cys Tyr Val Glu Asp Pro Gln Gly Asn
 65 70 75
 Thr Ile Tyr Arg Glu Thr Lys Lys Gln Tyr Asp Ser Phe Thr Tyr
 80 85 90
 Arg Ala Glu Val Lys Gly Val Tyr Gln Phe Cys Phe Ser Asn Glu
 95 100 105
 Phe Ser Thr Phe Ser His Lys Thr Val Tyr Phe Asp Phe Gln Val
 110 115 120
 Gly Asp Glu Pro Pro Ile Leu Pro Asp Met Gly Asn Arg Val Thr
 125 130 135

Ala	Leu	Thr	Gln	Met	Glu	Ser	Ala	Cys	Val	Thr	Ile	His	Glu	Ala
				140					145				150	
Leu	Lys	Thr	Val	Ile	Asp	Ser	Gln	Thr	His	Tyr	Arg	Leu	Arg	Glu
				155					160				165	
Ala	Gln	Asp	Arg	Ala	Arg	Ala	Glu	Asp	Leu	Asn	Ser	Arg	Val	Ser
				170					175				180	
Tyr	Trp	Ser	Val	Gly	Glu	Thr	Ile	Ala	Leu	Phe	Val	Val	Ser	Phe
				185					190				195	
Ser	Gln	Val	Leu	Leu	Leu	Lys	Ser	Phe	Phe	Thr	Glu	Lys	Arg	Pro
				200					205				210	
Ile	Ser	Arg	Ala	Val	His	Ser								
				215										

<210> 125
 <211> 756
 <212> DNA
 <213> Homo Sapien

<400> 125
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 gaggcctgat taagatggtc catctactgg tcttgtcagg tgcctggggc 200
 atgcaaagt ggggtgacct cgtctcaggc ttcctgcttt tccgaagcct 250
 tccccgacat accttcggac tagtgcagag caaactcttc cccttctact 300
 tccacatctc catgggctgt gccttcatca acctctgcat cttggcttca 350
 cagcatgctt gggctcagct cacattctgg gaggccagcc agctttacct 400
 gctgttcctg agccttacgc tggccactgt caacgcccgc tggctggaac 450
 cccgcaccac agctgccatg tggggccctgc aaaccgtgga gaaggagcga 500
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 ccagctgcga gagaaggacc ccaagtacag tgcctccgc cagaatttct 600
 tccgtacca tgggctgtcc tctctttgca atctgggctg cgtcctgagc 650
 aatgggctct gtctcgctgg ccttgccctg gaaataagga gcctctagca 700
 tgggccctgc atgctaataa atgcttcttc agaaatgaaa aaaaaaaaaa 750
 aaaaaa 756

<210> 126
 <211> 189

<212> PRT
 <213> Homo Sapien

<400> 126

Met	Glu	Glu	Gly	Gly	Asn	Leu	Gly	Gly	Leu	Ile	Lys	Met	Val	His	
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Leu	Leu	Val	Leu	Ser	Gly	Ala	Trp	Gly	Met	Gln	Met	Trp	Val	Thr	
				20					25					30	
Phe	Val	Ser	Gly	Phe	Leu	Leu	Phe	Arg	Ser	Leu	Pro	Arg	His	Thr	
				35					40					45	
Phe	Gly	Leu	Val	Gln	Ser	Lys	Leu	Phe	Pro	Phe	Tyr	Phe	His	Ile	
				50					55					60	
Ser	Met	Gly	Cys	Ala	Phe	Ile	Asn	Leu	Cys	Ile	Leu	Ala	Ser	Gln	
				65					70					75	
His	Ala	Trp	Ala	Gln	Leu	Thr	Phe	Trp	Glu	Ala	Ser	Gln	Leu	Tyr	
				80					85					90	
Leu	Leu	Phe	Leu	Ser	Leu	Thr	Leu	Ala	Thr	Val	Asn	Ala	Arg	Trp	
				95					100					105	
Leu	Glu	Pro	Arg	Thr	Thr	Ala	Ala	Met	Trp	Ala	Leu	Gln	Thr	Val	
				110					115					120	
Glu	Lys	Glu	Arg	Gly	Leu	Gly	Gly	Glu	Val	Pro	Gly	Ser	His	Gln	
				125					130					135	
Gly	Pro	Asp	Pro	Tyr	Arg	Gln	Leu	Arg	Glu	Lys	Asp	Pro	Lys	Tyr	
				140					145					150	
Ser	Ala	Leu	Arg	Gln	Asn	Phe	Phe	Arg	Tyr	His	Gly	Leu	Ser	Ser	
				155					160					165	
Leu	Cys	Asn	Leu	Gly	Cys	Val	Leu	Ser	Asn	Gly	Leu	Cys	Leu	Ala	
				170					175					180	
Gly	Leu	Ala	Leu	Glu	Ile	Arg	Ser	Leu							
				185											

<210> 127
 <211> 1027
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1017, 1020
 <223> unknown base

<400> 127

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aaaattggaa tgggattaac aggatttggg gtgtttttcc tgttctttgg 150
 aatgattctc ttttttgaca aagcactact ggctatttga aatgttttat 200
 ttgtagccgg cttggctttt gtaattgggt tagaaagaac attcagattc 250
 ttcttccaaa aacataaaat gaaagctaca gggttttttc tgggtggtgt 300
 attttagtgc cttattgggt ggcttttgat aggcattgat ttcgaaattt 350
 atggattttt tctcttggtc aggggcttct ttctgtcgt tgttggcttt 400
 attagaagag tgccagtcct tggatccctc ctaaatttac ctggaattag 450
 atcatttgta gataaagttg gagaaagcaa caatatggta taacaacaag 500
 tgaatttgaa gactcattta aaatattgtg ttatttataa agtcatttga 550
 agaatttca gcacaaaatt aaattacatg aaatagcttg taatgttctt 600
 tacaggagtt taaaacgtat agcctacaaa gtaccagcag caaattagca 650
 aagaagcagt gaaaacaggc ttctactcaa gtgaactaag aagaagtcag 700
 caagcaaact gagagagggt aaatccatgt taatgatgct taagaaactc 750
 ttgaaggcta tttgtgttgt ttttccacaa tgtgcgaaac tcagccatcc 800
 ttagagaact gtggtgcctg tttcttttct ttttattttg aaggctcagg 850
 agcatccata ggcatttgct ttttagaagt gtccactgca atggcaaaaa 900
 tatttccagt tgcactgtat ctctggaagt gatgcatgaa ttcgatttga 950
 ttgtgtcatt ttaaagtatt aaaaccaagg aaacccaat tttgatgtat 1000
 ggattacttt tttttgngcn cagggcc 1027

<210> 128
 <211> 138
 <212> PRT
 <213> Homo Sapien

<400> 128
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 Gly Phe Gly Val Phe Phe Leu Phe Phe Gly Met Ile Leu Phe Phe
 20 25 30
 Asp Lys Ala Leu Leu Ala Ile Gly Asn Val Leu Phe Val Ala Gly
 35 40 45
 Leu Ala Phe Val Ile Gly Leu Glu Arg Thr Phe Arg Phe Phe Phe
 50 55 60
 Gln Lys His Lys Met Lys Ala Thr Gly Phe Phe Leu Gly Gly Val
 65 70 75

Phe Val Val Leu Ile Gly Trp Pro Leu Ile Gly Met Ile Phe Glu
 80 85 90
 Ile Tyr Gly Phe Phe Leu Leu Phe Arg Gly Phe Phe Pro Val Val
 95 100 105
 Val Gly Phe Ile Arg Arg Val Pro Val Leu Gly Ser Leu Leu Asn
 110 115 120
 Leu Pro Gly Ile Arg Ser Phe Val Asp Lys Val Gly Glu Ser Asn
 125 130 135
 Asn Met Val

<210> 129
 <211> 1508
 <212> DNA
 <213> Homo Sapien

<400> 129
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 agggggaaaa atgctctttt gggtgctagg cctcctaata ctctgtggtt 150
 ttctgtggac tcgtaaagga aaactaaaga ttgaagacat cactgataag 200
 tacattttta tcaactggatg tgactcgggc ttgggaaact tggcagccag 250
 aacttttgat aaaaagggat ttcatgtaat cgctgcctgt ctgactgaat 300
 caggatcaac agctttaaag gcagaaacct cagagagact tcgtactgtg 350
 cttctggatg tgaccgaccc agagaatgtc aagaggactg cccagtgggt 400
 gaagaaccaa gttggggaga aaggctctctg gggctctgat aataatgctg 450
 gtgttcccg cgtgctggct cccactgact ggctgacact agaggactac 500
 agagaaccta ttgaagtga cctgtttgga ctcatacgtg tgacactaaa 550
 tatgcttcct ttggtcaaga aagctcaagg gagagttatt aatgtctcca 600
 gtgttggagg tcgccttgca atcgttggag ggggctatac tccatccaaa 650
 tatgcagtgg aaggtttcaa tgacagctta agacgggaca tgaaagcttt 700
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 cagatccagt aaaggtaatt gaaaaaaaaac tcgccatttg ggagcagctg 800
 tctccagaca tcaaacaaca atatggagaa gggttacattg aaaaaagtct 850
 agacaaaactg aaaggcaata aatcctatgt gaacatggac ctctctccgg 900
 tggtagagtg catggaccac gctctaacaa gtctcttccc taagactcat 950

140	145	150
Leu Val Lys Lys Ala Gln Gly Arg Val	Ile Asn Val Ser Ser Val	
155	160	165
Gly Gly Arg Leu Ala Ile Val Gly Gly	Gly Tyr Thr Pro Ser Lys	
170	175	180
Tyr Ala Val Glu Gly Phe Asn Asp Ser	Leu Arg Arg Asp Met Lys	
185	190	195
Ala Phe Gly Val His Val Ser Cys Ile	Glu Pro Gly Leu Phe Lys	
200	205	210
Thr Asn Leu Ala Asp Pro Val Lys Val	Ile Glu Lys Lys Leu Ala	
215	220	225
Ile Trp Glu Gln Leu Ser Pro Asp Ile	Lys Gln Gln Tyr Gly Glu	
230	235	240
Gly Tyr Ile Glu Lys Ser Leu Asp Lys	Leu Lys Gly Asn Lys Ser	
245	250	255
Tyr Val Asn Met Asp Leu Ser Pro Val	Val Glu Cys Met Asp His	
260	265	270
Ala Leu Thr Ser Leu Phe Pro Lys Thr	His Tyr Ala Ala Gly Lys	
275	280	285
Asp Ala Lys Ile Phe Trp Ile Pro Leu	Ser His Met Pro Ala Ala	
290	295	300
Leu Gln Asp Phe Leu Leu Leu Lys Gln	Lys Ala Glu Leu Ala Asn	
305	310	315
Pro Lys Ala Val		

<210> 131
 <211> 1818
 <212> DNA
 <213> Homo Sapien

<400> 131
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 caccatcatc tactcctact tggagtcggt ggtgaagttt ttcattcctc 150
 agaggagaaa atctgtggct ggggagattg ttctcattac tggagctggg 200
 catggaatag gcaggcagac tacttatgaa tttgcaaaac gacagagcat 250
 attggttctg tgggatatta ataagcgcg tgtggaggaa actgcagctg 300
 agtgccgaaa actaggcgtc actgcgcatg cgtatgtggt agactgcagc 350

aacagagaag agatctatcg ctctctaaat caggtgaaga aagaagtggg 400
 tgatgtaaca atcgtggtga ataatgctgg gacagtatat ccagccgatc 450
 ttctcagcac caaggatgaa gagattacca agacatttga ggtcaacatc 500
 ctaggacatt tttggatcac aaaagcactt cttccatcga tgatggagag 550
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 caagcacaag attatggcct gtattggaga cagatgaagt cgtaagaagt 800
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 tatcaatata tttctgagac tacagaagtt tcttctgaa cgcgcctcag 900
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 aaaatcaaaa tgaaatgaat aaataagctc cagccagaga tgtatgcatg 1000
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 caaacgaaca agattaatta cctgtcttcc tgtttctcaa gaatatttac 1150
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 gagatcaagt ttcagcaggc agctttatct caacctggac atatttttaag 1450
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 gaattttaag ttctagcccc atgataacct ttttctttgt aatttatgct 1700
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atggacccaa gagaagaa 1818

<210> 132

<211> 300

<212> PRT

<213> Homo Sapien

<400> 132

Met	Asn	Ile	Ile	Leu	Glu	Ile	Leu	Leu	Leu	Leu	Ile	Thr	Ile	Ile	
1				5					10					15	
Tyr	Ser	Tyr	Leu	Glu	Ser	Leu	Val	Lys	Phe	Phe	Ile	Pro	Gln	Arg	
			20						25					30	
Arg	Lys	Ser	Val	Ala	Gly	Glu	Ile	Val	Leu	Ile	Thr	Gly	Ala	Gly	
			35						40					45	
His	Gly	Ile	Gly	Arg	Gln	Thr	Thr	Tyr	Glu	Phe	Ala	Lys	Arg	Gln	
			50						55					60	
Ser	Ile	Leu	Val	Leu	Trp	Asp	Ile	Asn	Lys	Arg	Gly	Val	Glu	Glu	
			65						70					75	
Thr	Ala	Ala	Glu	Cys	Arg	Lys	Leu	Gly	Val	Thr	Ala	His	Ala	Tyr	
			80						85					90	
Val	Val	Asp	Cys	Ser	Asn	Arg	Glu	Glu	Ile	Tyr	Arg	Ser	Leu	Asn	
			95						100					105	
Gln	Val	Lys	Lys	Glu	Val	Gly	Asp	Val	Thr	Ile	Val	Val	Asn	Asn	
			110						115					120	
Ala	Gly	Thr	Val	Tyr	Pro	Ala	Asp	Leu	Leu	Ser	Thr	Lys	Asp	Glu	
			125						130					135	
Glu	Ile	Thr	Lys	Thr	Phe	Glu	Val	Asn	Ile	Leu	Gly	His	Phe	Trp	
			140						145					150	
Ile	Thr	Lys	Ala	Leu	Leu	Pro	Ser	Met	Met	Glu	Arg	Asn	His	Gly	
			155						160					165	
His	Ile	Val	Thr	Val	Ala	Ser	Val	Cys	Gly	His	Glu	Gly	Ile	Pro	
			170						175					180	
Tyr	Leu	Ile	Pro	Tyr	Cys	Ser	Ser	Lys	Phe	Ala	Ala	Val	Gly	Phe	
			185						190					195	
His	Arg	Gly	Leu	Thr	Ser	Glu	Leu	Gln	Ala	Leu	Gly	Lys	Thr	Gly	
			200						205					210	
Ile	Lys	Thr	Ser	Cys	Leu	Cys	Pro	Val	Phe	Val	Asn	Thr	Gly	Phe	
			215						220					225	
Thr	Lys	Asn	Pro	Ser	Thr	Arg	Leu	Trp	Pro	Val	Leu	Glu	Thr	Asp	
			230						235					240	
Glu	Val	Val	Arg	Ser	Leu	Ile	Asp	Gly	Ile	Leu	Thr	Asn	Lys	Lys	
			245						250					255	

Met	Ile	Phe	Val	Pro	Ser	Tyr	Ile	Asn	Ile	Phe	Leu	Arg	Leu	Gln
				260					265					270
Lys	Phe	Leu	Pro	Glu	Arg	Ala	Ser	Ala	Ile	Leu	Asn	Arg	Met	Gln
				275					280					285
Asn	Ile	Gln	Phe	Glu	Ala	Val	Val	Gly	His	Lys	Ile	Lys	Met	Lys
				290					295					300

<210> 133

<211> 1849

<212> DNA

<213> Homo Sapien

<400> 133

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cacactgaca ttctgaagc tagtccagct agtacaccac aaatcattaa 1050
gcataaagcc ttagacttag atgacagatg gcaattcaag agatctcggg 1100

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tgtagatac acaagacaaa cgatctaaag caaatactgg tagtagtaac 1150
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 aaagatgaag gggtttggtg aatattcacg gtctcctaca ttttgatcct 1250
 ttttaacctta caaggagatt tttttatttg gctgatgggt aaagccaaac 1300
 atttctattg tttttactat gttgagctac ttgcagtaag ttcatttggt 1350
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 ttcttttagaa ttggaaaagt gagaccaggc acagtggctc acacctgtaa 1550
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 aaatttgcaa aacatcatct aaaatttaaa aaaaaaaaaa aaaaaaaaaa 1849

<210> 134

<211> 409

<212> PRT

<213> Homo Sapien

<400> 134

Met	Glu	Gly	Glu	Ser	Thr	Ser	Ala	Val	Leu	Ser	Gly	Phe	Val	Leu
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Gly	Ala	Leu	Ala	Phe	Gln	His	Leu	Asn	Thr	Asp	Ser	Asp	Thr	Glu
				20					25					30
Gly	Phe	Leu	Leu	Gly	Glu	Val	Lys	Gly	Glu	Ala	Lys	Asn	Ser	Ile
				35					40					45
Thr	Asp	Ser	Gln	Met	Asp	Asp	Val	Glu	Val	Val	Tyr	Thr	Ile	Asp
				50					55					60
Ile	Gln	Lys	Tyr	Ile	Pro	Cys	Tyr	Gln	Leu	Phe	Ser	Phe	Tyr	Asn
				65					70					75
Ser	Ser	Gly	Glu	Val	Asn	Glu	Gln	Ala	Leu	Lys	Lys	Ile	Leu	Ser
				80					85					90
Asn	Val	Lys	Lys	Asn	Val	Val	Gly	Trp	Tyr	Lys	Phe	Arg	Arg	His
				95					100					105
Ser	Asp	Gln	Ile	Met	Thr	Phe	Arg	Glu	Arg	Leu	Leu	His	Lys	Asn

Leu	Gln	Glu	His	Phe	Ser	Asn	Gln	Asp	Leu	Val	Phe	Leu	Leu	Leu	110	115	120
				125					130					135			
Thr	Pro	Ser	Ile	Ile	Thr	Glu	Ser	Cys	Ser	Thr	His	Arg	Leu	Glu			
				140					145					150			
His	Ser	Leu	Tyr	Lys	Pro	Gln	Lys	Gly	Leu	Phe	His	Arg	Val	Pro			
				155					160					165			
Leu	Val	Val	Ala	Asn	Leu	Gly	Met	Ser	Glu	Gln	Leu	Gly	Tyr	Lys			
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Thr	Val	Ser	Gly	Ser	Cys	Met	Ser	Thr	Gly	Phe	Ser	Arg	Ala	Val			
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Gln	Thr	His	Ser	Ser	Lys	Phe	Phe	Glu	Glu	Asp	Gly	Ser	Leu	Lys			
				200					205					210			
Glu	Val	His	Lys	Ile	Asn	Glu	Met	Tyr	Ala	Ser	Leu	Gln	Glu	Glu			
				215					220					225			
Leu	Lys	Ser	Ile	Cys	Lys	Lys	Val	Glu	Asp	Ser	Glu	Gln	Ala	Val			
				230					235					240			
Asp	Lys	Leu	Val	Lys	Asp	Val	Asn	Arg	Leu	Lys	Arg	Glu	Ile	Glu			
				245					250					255			
Lys	Arg	Arg	Gly	Ala	Gln	Ile	Gln	Ala	Ala	Arg	Glu	Lys	Asn	Ile			
				260					265					270			
Gln	Lys	Asp	Pro	Gln	Glu	Asn	Ile	Phe	Leu	Cys	Gln	Ala	Leu	Arg			
				275					280					285			
Thr	Phe	Phe	Pro	Asn	Ser	Glu	Phe	Leu	His	Ser	Cys	Val	Met	Ser			
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Leu	Lys	Asn	Arg	His	Val	Ser	Lys	Ser	Ser	Cys	Asn	Tyr	Asn	His			
				305					310					315			
His	Leu	Asp	Val	Val	Asp	Asn	Leu	Thr	Leu	Met	Val	Glu	His	Thr			
				320					325					330			
Asp	Ile	Pro	Glu	Ala	Ser	Pro	Ala	Ser	Thr	Pro	Gln	Ile	Ile	Lys			
				335					340					345			
His	Lys	Ala	Leu	Asp	Leu	Asp	Asp	Arg	Trp	Gln	Phe	Lys	Arg	Ser			
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Arg	Leu	Leu	Asp	Thr	Gln	Asp	Lys	Arg	Ser	Lys	Ala	Asn	Thr	Gly			
				365					370					375			
Ser	Ser	Asn	Gln	Asp	Lys	Ala	Ser	Lys	Met	Ser	Ser	Pro	Glu	Thr			
				380					385					390			
Asp	Glu	Glu	Ile	Glu	Lys	Met	Lys	Gly	Phe	Gly	Glu	Tyr	Ser	Arg			
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Ser Pro Thr Phe

<210> 135

<211> 2651

<212> DNA

<213> Homo Sapien

<400> 135

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<210> 136
 <211> 556
 <212> PRT
 <213> Homo Sapien

<400> 136

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Ser	Glu	Val	Arg	Arg	Leu	Tyr	Val	Ser	Lys	Gly	Phe	Asn	Lys	Asn	35	40	45	
Asp	Ala	Pro	Leu	His	Glu	Ile	Asn	Gly	Asp	His	Leu	Lys	Ile	Cys	50	55	60	
Pro	Gln	Gly	Ser	Thr	Cys	Cys	Ser	Gln	Glu	Met	Glu	Glu	Lys	Tyr	65	70	75	
Ser	Leu	Gln	Ser	Lys	Asp	Asp	Phe	Lys	Ser	Val	Val	Ser	Glu	Gln	80	85	90	
Cys	Asn	His	Leu	Gln	Ala	Val	Phe	Ala	Ser	Arg	Tyr	Lys	Lys	Phe	95	100	105	
Asp	Glu	Phe	Phe	Lys	Glu	Leu	Leu	Glu	Asn	Ala	Glu	Lys	Ser	Leu	110	115	120	
Asn	Asp	Met	Phe	Val	Lys	Thr	Tyr	Gly	His	Leu	Tyr	Met	Gln	Asn	125	130	135	
Ser	Glu	Leu	Phe	Lys	Asp	Leu	Phe	Val	Glu	Leu	Lys	Arg	Tyr	Tyr	140	145	150	
Val	Val	Gly	Asn	Val	Asn	Leu	Glu	Glu	Met	Leu	Asn	Asp	Phe	Trp	155	160	165	
Ala	Arg	Leu	Leu	Glu	Arg	Met	Phe	Arg	Leu	Val	Asn	Ser	Gln	Tyr	170	175	180	
His	Phe	Thr	Asp	Glu	Tyr	Leu	Glu	Cys	Val	Ser	Lys	Tyr	Thr	Glu	185	190	195	
Gln	Leu	Lys	Pro	Phe	Gly	Asp	Val	Pro	Arg	Lys	Leu	Lys	Leu	Gln	200	205	210	
Val	Thr	Arg	Ala	Phe	Val	Ala	Ala	Arg	Thr	Phe	Ala	Gln	Gly	Leu	215	220	225	
Ala	Val	Ala	Gly	Asp	Val	Val	Ser	Lys	Val	Ser	Val	Val	Asn	Pro	230	235	240	
Thr	Ala	Gln	Cys	Thr	His	Ala	Leu	Leu	Lys	Met	Ile	Tyr	Cys	Ser	245	250	255	
His	Cys	Arg	Gly	Leu	Val	Thr	Val	Lys	Pro	Cys	Tyr	Asn	Tyr	Cys				

Ser	Asn	Ile	Met	Arg	Gly	Cys	Leu	Ala	Asn	Gln	Gly	Asp	Leu	Asp			
				275					280					285			
Phe	Glu	Trp	Asn	Asn	Phe	Ile	Asp	Ala	Met	Leu	Met	Val	Ala	Glu			
				290					295					300			
Arg	Leu	Glu	Gly	Pro	Phe	Asn	Ile	Glu	Ser	Val	Met	Asp	Pro	Ile			
				305					310					315			
Asp	Val	Lys	Ile	Ser	Asp	Ala	Ile	Met	Asn	Met	Gln	Asp	Asn	Ser			
				320					325					330			
Val	Gln	Val	Ser	Gln	Lys	Val	Phe	Gln	Gly	Cys	Gly	Pro	Pro	Lys			
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Pro	Leu	Pro	Ala	Gly	Arg	Ile	Ser	Arg	Ser	Ile	Ser	Glu	Ser	Ala			
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Phe	Ser	Ala	Arg	Phe	Arg	Pro	His	His	Pro	Glu	Glu	Arg	Pro	Thr			
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Thr	Ala	Ala	Gly	Thr	Ser	Leu	Asp	Arg	Leu	Val	Thr	Asp	Val	Lys			
				380					385					390			
Glu	Lys	Leu	Lys	Gln	Ala	Lys	Lys	Phe	Trp	Ser	Ser	Leu	Pro	Ser			
				395					400					405			
Asn	Val	Cys	Asn	Asp	Glu	Arg	Met	Ala	Ala	Gly	Asn	Gly	Asn	Glu			
				410					415					420			
Asp	Asp	Cys	Trp	Asn	Gly	Lys	Gly	Lys	Ser	Arg	Tyr	Leu	Phe	Ala			
				425					430					435			
Val	Thr	Gly	Asn	Gly	Leu	Ala	Asn	Gln	Gly	Asn	Asn	Pro	Glu	Val			
				440					445					450			
Gln	Val	Asp	Thr	Ser	Lys	Pro	Asp	Ile	Leu	Ile	Leu	Arg	Gln	Ile			
				455					460					465			
Met	Ala	Leu	Arg	Val	Met	Thr	Ser	Lys	Met	Lys	Asn	Ala	Tyr	Asn			
				470					475					480			
Gly	Asn	Asp	Val	Asp	Phe	Phe	Asp	Ile	Ser	Asp	Glu	Ser	Ser	Gly			
				485					490					495			
Glu	Gly	Ser	Gly	Ser	Gly	Cys	Glu	Tyr	Gln	Gln	Cys	Pro	Ser	Glu			
				500					505					510			
Phe	Asp	Tyr	Asn	Ala	Thr	Asp	His	Ala	Gly	Lys	Ser	Ala	Asn	Glu			
				515					520					525			
Lys	Ala	Asp	Ser	Ala	Gly	Val	Arg	Pro	Gly	Ala	Gln	Ala	Tyr	Leu			
				530					535					540			
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Arg

<210> 137
<211> 2720
<212> DNA
<213> Homo Sapien

<400> 137
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<210> 138

<211> 699

<212> PRT

<213> Homo Sapien

<400> 138

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				20					25					30
Val	Ala	Thr	Thr	Val	Val	Met	Tyr	Pro	Pro	Pro	Pro	Pro	Pro	Pro
				35					40					45
His	Arg	Asp	Phe	Ile	Ser	Val	Thr	Leu	Ser	Phe	Gly	Glu	Ser	Tyr
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Asp	Asn	Ser	Lys	Ser	Trp	Arg	Arg	Arg	Ser	Cys	Trp	Arg	Lys	Trp
				65					70					75
Lys	Gln	Leu	Ser	Arg	Leu	Gln	Arg	Asn	Met	Ile	Leu	Phe	Leu	Leu
				80					85					90
Ala	Phe	Leu	Leu	Phe	Cys	Gly	Leu	Leu	Phe	Tyr	Ile	Asn	Leu	Ala
				95					100					105
Asp	His	Trp	Lys	Ala	Leu	Ala	Phe	Arg	Leu	Glu	Glu	Glu	Gln	Lys
				110					115					120
Met	Arg	Pro	Glu	Ile	Ala	Gly	Leu	Lys	Pro	Ala	Asn	Pro	Pro	Val
				125					130					135
Leu	Pro	Ala	Pro	Gln	Lys	Ala	Asp	Thr	Asp	Pro	Glu	Asn	Leu	Pro
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Glu	Ile	Ser	Ser	Gln	Lys	Thr	Gln	Arg	His	Ile	Gln	Arg	Gly	Pro
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Pro	His	Leu	Gln	Ile	Arg	Pro	Pro	Ser	Gln	Asp	Leu	Lys	Asp	Gly
				170					175					180
Thr	Gln	Glu	Glu	Ala	Thr	Lys	Arg	Gln	Glu	Ala	Pro	Val	Asp	Pro
				185					190					195
Arg	Pro	Glu	Gly	Asp	Pro	Gln	Arg	Thr	Val	Ile	Ser	Trp	Arg	Gly
				200					205					210
Ala	Val	Ile	Glu	Pro	Glu	Gln	Gly	Thr	Glu	Leu	Pro	Ser	Arg	Arg
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Gly	Thr	Pro	Val	His	Leu	Asn	Tyr	Arg	Gln	Lys	Gly	Val	Ile	Asp
				245					250					255

Val	Phe	Leu	His	Ala	Trp	Lys	Gly	Tyr	Arg	Lys	Phe	Ala	Trp	Gly		260	265	270
His	Asp	Glu	Leu	Lys	Pro	Val	Ser	Arg	Ser	Phe	Ser	Glu	Trp	Phe		275	280	285
Gly	Leu	Gly	Leu	Thr	Leu	Ile	Asp	Ala	Leu	Asp	Thr	Met	Trp	Ile		290	295	300
Leu	Gly	Leu	Arg	Lys	Glu	Phe	Glu	Glu	Ala	Arg	Lys	Trp	Val	Ser		305	310	315
Lys	Lys	Leu	His	Phe	Glu	Lys	Asp	Val	Asp	Val	Asn	Leu	Phe	Glu		320	325	330
Ser	Thr	Ile	Arg	Ile	Leu	Gly	Gly	Leu	Leu	Ser	Ala	Tyr	His	Leu		335	340	345
Ser	Gly	Asp	Ser	Leu	Phe	Leu	Arg	Lys	Ala	Glu	Asp	Phe	Gly	Asn		350	355	360
Arg	Leu	Met	Pro	Ala	Phe	Arg	Thr	Pro	Ser	Lys	Ile	Pro	Tyr	Ser		365	370	375
Asp	Val	Asn	Ile	Gly	Thr	Gly	Val	Ala	His	Pro	Pro	Arg	Trp	Thr		380	385	390
Ser	Asp	Ser	Thr	Val	Ala	Glu	Val	Thr	Ser	Ile	Gln	Leu	Glu	Phe		395	400	405
Arg	Glu	Leu	Ser	Arg	Leu	Thr	Gly	Asp	Lys	Lys	Phe	Gln	Glu	Ala		410	415	420
Val	Glu	Lys	Val	Thr	Gln	His	Ile	His	Gly	Leu	Ser	Gly	Lys	Lys		425	430	435
Asp	Gly	Leu	Val	Pro	Met	Phe	Ile	Asn	Thr	His	Ser	Gly	Leu	Phe		440	445	450
Thr	His	Leu	Gly	Val	Phe	Thr	Leu	Gly	Ala	Arg	Ala	Asp	Ser	Tyr		455	460	465
Tyr	Glu	Tyr	Leu	Leu	Lys	Gln	Trp	Ile	Gln	Gly	Gly	Lys	Gln	Glu		470	475	480
Thr	Gln	Leu	Leu	Glu	Asp	Tyr	Val	Glu	Ala	Ile	Glu	Gly	Val	Arg		485	490	495
Thr	His	Leu	Leu	Arg	His	Ser	Glu	Pro	Ser	Lys	Leu	Thr	Phe	Val		500	505	510
Gly	Glu	Leu	Ala	His	Gly	Arg	Phe	Ser	Ala	Lys	Met	Asp	His	Leu		515	520	525
Val	Cys	Phe	Leu	Pro	Gly	Thr	Leu	Ala	Leu	Gly	Val	Tyr	His	Gly		530	535	540
Leu	Pro	Ala	Ser	His	Met	Glu	Leu	Ala	Gln	Glu	Leu	Met	Glu	Thr				

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Cys Tyr Gln Met	Asn Arg Gln Met Glu Thr Gly Leu Ser Pro Glu				
	560		565		570
Ile Val His Phe	Asn Leu Tyr Pro Gln Pro Gly Arg Arg Asp Val				
	575		580		585
Glu Val Lys Pro	Ala Asp Arg His Asn Leu Leu Arg Pro Glu Thr				
	590		595		600
Val Glu Ser Leu	Phe Tyr Leu Tyr Arg Val Thr Gly Asp Arg Lys				
	605		610		615
Tyr Gln Asp Trp	Gly Trp Glu Ile Leu Gln Ser Phe Ser Arg Phe				
	620		625		630
Thr Arg Val Pro	Ser Gly Gly Tyr Ser Ser Ile Asn Asn Val Gln				
	635		640		645
Asp Pro Gln Lys	Pro Glu Pro Arg Asp Lys Met Glu Ser Phe Phe				
	650		655		660
Leu Gly Glu Thr	Leu Lys Tyr Leu Phe Leu Leu Phe Ser Asp Asp				
	665		670		675
Pro Asn Leu Leu	Ser Leu Asp Ala Tyr Val Phe Asn Thr Glu Ala				
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His Pro Leu Pro	Ile Trp Thr Pro Ala				
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<211> 870

<212> DNA

<213> Homo Sapien

<400> 139

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<210> 140
 <211> 119
 <212> PRT
 <213> Homo Sapien

<400> 140
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 35 40 45
 Gly Gly Gln Glu Cys Glu Cys Lys Asp Trp Phe Leu Arg Ala Pro
 50 55 60
 Arg Arg Lys Phe Met Thr Val Ser Gly Leu Pro Lys Lys Gln Cys
 65 70 75
 Pro Cys Asp His Phe Lys Gly Asn Val Lys Lys Thr Arg His Gln
 80 85 90
 Arg His His Arg Lys Pro Asn Lys His Ser Arg Ala Cys Gln Gln
 95 100 105
 Phe Leu Lys Gln Cys Gln Leu Arg Ser Phe Ala Leu Pro Leu
 110 115

<210> 141
 <211> 551
 <212> DNA
 <213> Homo Sapien

<400> 141
 aatggctgtc ttagtacttc gcctgacagt tgtcctggga ctgcttgtct 50
 tattcctgac ctgctatgca gacgacaaac cagacaagcc agacgacaag 100
 ccagacgact cgggcaaaga cccaaagcca gacttcccca aattcctaag 150

cctcctgggc acagagatca ttgagaatgc agtcgagttc atcctccgct 200
ccatgtccag gagcacagga tttatggaat ttgatgataa tgaaggaaaa 250
cattcatcaa agtgacatcc tcaggacaca cccatgtggc tcctggacaa 300
tccaagagca gccaaatcct gcttttccag tttggctcca caagtccctc 350
aggacagagc cctcaaagca actcccaacg agttctcagg attcaggctc 400
tggcttcaac caaacagaac tcattttgaa caccctgact gcatttttgc 450
ttttagaaaag ttagaataaa tatggcgctt tgggatcaca tagttgatgg 500
agaggaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 550

a 551

<210> 142

<211> 87

<212> PRT

<213> Homo Sapien

<400> 142

Met	Ala	Val	Leu	Val	Leu	Arg	Leu	Thr	Val	Val	Leu	Gly	Leu	Leu
1				5					10					15
Val	Leu	Phe	Leu	Thr	Cys	Tyr	Ala	Asp	Asp	Lys	Pro	Asp	Lys	Pro
				20					25					30
Asp	Asp	Lys	Pro	Asp	Asp	Ser	Gly	Lys	Asp	Pro	Lys	Pro	Asp	Phe
				35					40					45
Pro	Lys	Phe	Leu	Ser	Leu	Leu	Gly	Thr	Glu	Ile	Ile	Glu	Asn	Ala
				50					55					60
Val	Glu	Phe	Ile	Leu	Arg	Ser	Met	Ser	Arg	Ser	Thr	Gly	Phe	Met
				65					70					75
Glu	Phe	Asp	Asp	Asn	Glu	Gly	Lys	His	Ser	Ser	Lys			
				80					85					

<210> 143

<211> 1371

<212> DNA

<213> Homo Sapien

<400> 143

ggacgccagc gctgcagag gctgagcagg gaaaaagcca gtgccccagc 50
ggaagcacag ctcagagctg gtctgccatg gacatcctgg tcccactcct 100
gcagctgctg gtgctgcttc ttaccctgcc cctgcacctc atggctctgc 150
tgggctgctg gcagcccctg tgcaaaagct acttccccta cctgatggcc 200
gtgctgactc ccaagagcaa ccgcaagatg gagagcaaga aacgggagct 250

Leu	Cys	Lys	Ser	Tyr	Phe	Pro	Tyr	Leu	Met	Ala	Val	Leu	Thr	Pro	
				35					40					45	
Lys	Ser	Asn	Arg	Lys	Met	Glu	Ser	Lys	Lys	Arg	Glu	Leu	Phe	Ser	
				50					55					60	
Gln	Ile	Lys	Gly	Leu	Thr	Gly	Ala	Ser	Gly	Lys	Val	Ala	Leu	Leu	
				65					70					75	
Glu	Leu	Gly	Cys	Gly	Thr	Gly	Ala	Asn	Phe	Gln	Phe	Tyr	Pro	Pro	
				80					85					90	
Gly	Cys	Arg	Val	Thr	Cys	Leu	Asp	Pro	Asn	Pro	His	Phe	Glu	Lys	
				95					100					105	
Phe	Leu	Thr	Lys	Ser	Met	Ala	Glu	Asn	Arg	His	Leu	Gln	Tyr	Glu	
				110					115					120	
Arg	Phe	Val	Val	Ala	Pro	Gly	Glu	Asp	Met	Arg	Gln	Leu	Ala	Asp	
				125					130					135	
Gly	Ser	Met	Asp	Val	Val	Val	Cys	Thr	Leu	Val	Leu	Cys	Ser	Val	
				140					145					150	
Gln	Ser	Pro	Arg	Lys	Val	Leu	Gln	Glu	Val	Arg	Arg	Val	Leu	Arg	
				155					160					165	
Pro	Gly	Gly	Val	Leu	Phe	Phe	Trp	Glu	His	Val	Ala	Glu	Pro	Tyr	
				170					175					180	
Gly	Ser	Trp	Ala	Phe	Met	Trp	Gln	Gln	Val	Phe	Glu	Pro	Thr	Trp	
				185					190					195	
Lys	His	Ile	Gly	Asp	Gly	Cys	Cys	Leu	Thr	Arg	Glu	Thr	Trp	Lys	
				200					205					210	
Asp	Leu	Glu	Asn	Ala	Gln	Phe	Ser	Glu	Ile	Gln	Met	Glu	Arg	Gln	
				215					220					225	
Pro	Pro	Pro	Leu	Lys	Trp	Leu	Pro	Val	Gly	Pro	His	Ile	Met	Gly	
				230					235					240	
Lys	Ala	Val	Lys	Gln	Ser	Phe	Pro	Ser	Ser	Lys	Ala	Leu	Ile	Cys	
				245					250					255	
Ser	Phe	Pro	Ser	Leu	Gln	Leu	Glu	Gln	Ala	Thr	His	Gln	Pro	Ile	
				260					265					270	
Tyr	Leu	Pro	Leu	Arg	Gly	Thr									
				275											

<210> 145

<211> 1621

<212> DNA

<213> Homo Sapien

<400> 145

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cctcatcgca ggcagatggt ggggctttgt ccgaacagct cccctctgcc 100
agcttctgta gataagggtt aaaaactaat atttatatga cagaagaaaa 150
agatgtcatt ccgtaaagta aacatcatca tcttggtcct ggctgttgct 200
ctcttcttac tggttttgca ccataacttc ctcagcttga gcagtttggt 250
aaggaatgag gttacagatt caggaattgt agggcctcaa cctatagact 300
ttgtcccaaa tgctctccga catgcagtag atgggagaca agaggagatt 350
cctgtggtca tcgctgcac tgaagacagg cttggggggg ccattgcagc 400
tataaacagc attcagcaca aactcgcct caatgtgatt ttctacattg 450
ttactctcaa caatacagca gaccatctcc ggtcctgggt caacagtgat 500
tccttgaaaa gcatcagata caaaattgtc aattttgacc ctaaaactttt 550
ggaaggaaaa gtaaaggagg atcctgacca gggggaatcc atgaaacctt 600
taacctttgc aagggttctac ttgccaatc tggttcccag cgcaaagaag 650
gccatataca tggatgatga tgtaattgtg caaggatgata ttcttgccct 700
ttacaataca gcactgaagc caggacatgc agctgcattt tcagaagatt 750
gtgattcagc ctctactaaa gttgtcatcc gtggagcagg aaaccagtac 800
aattacattg gctatcttga ctataaaaag gaaagaattc gtaagctttc 850
catgaaagcc agcacttgct catttaatcc tggagttttt gttgcaaacc 900
tgacggaatg gaaacgacag aatataacta accaactgga aaaatggatg 950
aaactcaatg tagaagaggg actgtatagc agaaccctgg ctggtagcat 1000
cacaacacct cctctgctta tcgtatttta tcaacagcac tctaccatcg 1050
atcctatgtg gaatgtccgc caccttggtt ccagtgtctg aaaacgatat 1100
tcacctcagt ttgtaaagc tgccaagtta ctccattgga atggacattt 1150
gaagccatgg ggaaggactg cttcatatac tgatgttttg gaaaaatgg 1200
atattccaga cccaacaggc aaattcaacc taatccgaag atataccgag 1250
atctcaaaca taaagtgaag cagaatttga actgtaagca agcatttctc 1300
aggaagtccct ggaagatagc atgcatggga agtaacagtt gctaggcttc 1350
aatgcctatc ggtagcaagc catggaaaaa gatgtgtcag ctaggttaaag 1400
atgacaaact gccctgtctg gcagtcagct tcccagacag actatagact 1450
ataaatatgt ctccatctgc cttaccaagt gttttcttac tacaatgctg 1500

aatgactgga aagaagaact gatatggcta gttcagctag ctggtacaga 1550
 taattcaaaa ctgctgttgg ttttaatttt gtaacctgtg gcctgatctg 1600
 taaataaaaac ttacattttt c 1621

<210> 146
 <211> 371
 <212> PRT
 <213> Homo Sapien

<400> 146
 Met Ser Phe Arg Lys Val Asn Ile Ile Ile Leu Val Leu Ala Val
 1 5 10 15
 Ala Leu Phe Leu Leu Val Leu His His Asn Phe Leu Ser Leu Ser
 20 25 30
 Ser Leu Leu Arg Asn Glu Val Thr Asp Ser Gly Ile Val Gly Pro
 35 40 45
 Gln Pro Ile Asp Phe Val Pro Asn Ala Leu Arg His Ala Val Asp
 50 55 60
 Gly Arg Gln Glu Glu Ile Pro Val Val Ile Ala Ala Ser Glu Asp
 65 70 75
 Arg Leu Gly Gly Ala Ile Ala Ala Ile Asn Ser Ile Gln His Asn
 80 85 90
 Thr Arg Ser Asn Val Ile Phe Tyr Ile Val Thr Leu Asn Asn Thr
 95 100 105
 Ala Asp His Leu Arg Ser Trp Leu Asn Ser Asp Ser Leu Lys Ser
 110 115 120
 Ile Arg Tyr Lys Ile Val Asn Phe Asp Pro Lys Leu Leu Glu Gly
 125 130 135
 Lys Val Lys Glu Asp Pro Asp Gln Gly Glu Ser Met Lys Pro Leu
 140 145 150
 Thr Phe Ala Arg Phe Tyr Leu Pro Ile Leu Val Pro Ser Ala Lys
 155 160 165
 Lys Ala Ile Tyr Met Asp Asp Asp Val Ile Val Gln Gly Asp Ile
 170 175 180
 Leu Ala Leu Tyr Asn Thr Ala Leu Lys Pro Gly His Ala Ala Ala
 185 190 195
 Phe Ser Glu Asp Cys Asp Ser Ala Ser Thr Lys Val Val Ile Arg
 200 205 210
 Gly Ala Gly Asn Gln Tyr Asn Tyr Ile Gly Tyr Leu Asp Tyr Lys
 215 220 225
 Lys Glu Arg Ile Arg Lys Leu Ser Met Lys Ala Ser Thr Cys Ser

230	235	240
Phe Asn Pro Gly Val Phe Val Ala Asn Leu Thr Glu Trp Lys Arg		
245	250	255
Gln Asn Ile Thr Asn Gln Leu Glu Lys Trp Met Lys Leu Asn Val		
260	265	270
Glu Glu Gly Leu Tyr Ser Arg Thr Leu Ala Gly Ser Ile Thr Thr		
275	280	285
Pro Pro Leu Leu Ile Val Phe Tyr Gln Gln His Ser Thr Ile Asp		
290	295	300
Pro Met Trp Asn Val Arg His Leu Gly Ser Ser Ala Gly Lys Arg		
305	310	315
Tyr Ser Pro Gln Phe Val Lys Ala Ala Lys Leu Leu His Trp Asn		
320	325	330
Gly His Leu Lys Pro Trp Gly Arg Thr Ala Ser Tyr Thr Asp Val		
335	340	345
Trp Glu Lys Trp Tyr Ile Pro Asp Pro Thr Gly Lys Phe Asn Leu		
350	355	360
Ile Arg Arg Tyr Thr Glu Ile Ser Asn Ile Lys		
365	370	

<210> 147
 <211> 1660
 <212> DNA
 <213> Homo Sapien

<400> 147
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 ccaggtctac cagttcctcc aagcaagtca tttcccttat ttaaccgatg 100
 tgtccctcaa acacctgagt gctactccct atttgcattct gttttgataa 150
 atgatgttga caccctccac cgaattctaa gtggaatcat gtcgggaaga 200
 gatacaatcc ttggcctgtg taccctcgca ttagccttgt ctttggccat 250
 gatgtttacc ttcagattca tcaccaccct tctgggttcac attttcattt 300
 cattgggttat ttggggattg ttgtttgtct gcggtgtttt atggtggctg 350
 tattatgact ataccaacga cctcagcata gaattggaca cagaaaggga 400
 aaatatgaag tgcgtgctgg gggttgctat cgtatccaca ggcattcacgg 450
 cagtgtgtgt cgtcttgatt ttgtttctca gaaagagaat aaaattgaca 500
 gttgagcttt tccaaatcac aaataaagcc atcagcagtg ctcccttctt 550
 gctgttccag ccaactgtgga catttgccat cctcattttt ttctgggtcc 600

Phe	Val	Cys	Gly	Val	Leu	Trp	Trp	Leu	Tyr	Tyr	Asp	Tyr	Thr	Asn	
				50					55					60	
Asp	Leu	Ser	Ile	Glu	Leu	Asp	Thr	Glu	Arg	Glu	Asn	Met	Lys	Cys	
				65					70					75	
Val	Leu	Gly	Phe	Ala	Ile	Val	Ser	Thr	Gly	Ile	Thr	Ala	Val	Leu	
				80					85					90	
Leu	Val	Leu	Ile	Phe	Val	Leu	Arg	Lys	Arg	Ile	Lys	Leu	Thr	Val	
				95					100					105	
Glu	Leu	Phe	Gln	Ile	Thr	Asn	Lys	Ala	Ile	Ser	Ser	Ala	Pro	Phe	
				110					115					120	
Leu	Leu	Phe	Gln	Pro	Leu	Trp	Thr	Phe	Ala	Ile	Leu	Ile	Phe	Phe	
				125					130					135	
Trp	Val	Leu	Trp	Val	Ala	Val	Leu	Leu	Ser	Leu	Gly	Thr	Ala	Gly	
				140					145					150	
Ala	Ala	Gln	Val	Met	Glu	Gly	Gly	Gln	Val	Glu	Tyr	Lys	Pro	Leu	
				155					160					165	
Ser	Gly	Ile	Arg	Tyr	Met	Trp	Ser	Tyr	His	Leu	Ile	Gly	Leu	Ile	
				170					175					180	
Trp	Thr	Ser	Glu	Phe	Ile	Leu	Ala	Cys	Gln	Gln	Met	Thr	Ile	Ala	
				185					190					195	
Gly	Ala	Val	Val	Thr	Cys	Tyr	Phe	Asn	Arg	Ser	Lys	Asn	Asp	Pro	
				200					205					210	
Pro	Asp	His	Pro	Ile	Leu	Ser	Ser	Leu	Ser	Ile	Leu	Phe	Phe	Tyr	
				215					220					225	
His	Gln	Gly	Thr	Val	Val	Lys	Gly	Ser	Phe	Leu	Ile	Ser	Val	Val	
				230					235					240	
Arg	Ile	Pro	Arg	Ile	Ile	Val	Met	Tyr	Met	Gln	Asn	Ala	Leu	Lys	
				245					250					255	
Glu	Gln	Gln	His	Gly	Ala	Leu	Ser	Arg	Tyr	Leu	Phe	Arg	Cys	Cys	
				260					265					270	
Tyr	Cys	Cys	Phe	Trp	Cys	Leu	Asp	Lys	Tyr	Leu	Leu	His	Leu	Asn	
				275					280					285	
Gln	Asn	Ala	Tyr	Thr	Thr	Thr	Ala	Ile	Asn	Gly	Thr	Asp	Phe	Cys	
				290					295					300	
Thr	Ser	Ala	Lys	Asp	Ala	Phe	Lys	Ile	Leu	Ser	Lys	Asn	Ser	Ser	
				305					310					315	
His	Phe	Thr	Ser	Ile	Asn	Cys	Phe	Gly	Asp	Phe	Ile	Ile	Phe	Leu	
				320					325					330	
Gly	Lys	Val	Leu	Val	Val	Cys	Phe	Thr	Val	Phe	Gly	Gly	Leu	Met	

335	340	345
Ala Phe Asn Tyr Asn Arg Ala Phe Gln Val Trp Ala Val Pro Leu		
350	355	360
Leu Leu Val Ala Phe Phe Ala Tyr Leu Val Ala His Ser Phe Leu		
365	370	375
Ser Val Phe Glu Thr Val Leu Asp Ala Leu Phe Leu Cys Phe Ala		
380	385	390
Val Asp Leu Glu Thr Asn Asp Gly Ser Ser Glu Lys Pro Tyr Phe		
395	400	405
Met Asp Gln Glu Phe Leu Ser Phe Val Lys Arg Ser Asn Lys Leu		
410	415	420
Asn Asn Ala Arg Ala Gln Gln Asp Lys His Ser Leu Arg Asn Glu		
425	430	435
Glu Gly Thr Glu Leu Gln Ala Ile Val Arg		
440	445	

<210> 149
 <211> 2773
 <212> DNA
 <213> Homo Sapien

<400> 149
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 aagggaaaaa gaatattcat tctgtgtggt gaaaattttt tgaaaaaaa 150
 attgccttct tcaaacaagg gtgtcattct gatatttatg aggactgttg 200
 ttctcactat gaaggcatct gttattgaaa tgttccttgt tttgctggtg 250
 actggagtag attcaaaca agaaacggca aagaagatta aaaggcccaa 300
 gtccactgtg cctcagatca actgcatgtg caaagccgga aagatcatcg 350
 atcctgagtt cattgtgaaa tgtccagcag gatgccaaga ccccaaatac 400
 catgtttatg gcaactgacgt gtagcatcc tactccagtg tgtgtggcgc 450
 tgccgtacac agtgggtgtg ttgataattc aggagggaaa atacttggtc 500
 ggaaggttgc tggacagtct gggtacaaag ggagttattc caacgggtgc 550
 caatcggtat ccctaccacg atggagagaa tcctttatcg tcttagaaaag 600
 taaacccaaa aagggtgtaa cctaccatc agctcttaca tactcatcat 650
 cgaaaagtcc agctgcccaa gcaggtgaga ccacaaaagc ctatcagagg 700
 ccacctattc cagggacaac tgcacagccg gtcactctga tgcagcttct 750

ggctgtcact gtagctgtgg ccacccccac caccttgcca aggccatccc 800
 cttctgctgc ttctaccacc agcatcccca gaccacaatc agtggggccac 850
 aggagccagg agatggatct ctgggtccact gccacctaca caagcagcca 900
 aaacaggccc agagctgata caggtatcca aaggcaagat ccttcaggag 950
 ctgccttcca gaaacctgtt ggagcggatg tcagcctggg acttggtcca 1000
 aaagaagaat tgagcacaca gtctttggag ccagtatccc tgggagatcc 1050
 aaactgcaaa attgacttgt cgtttttaat tgatggggagc accagcattg 1100
 gcaaacggcg attccgaatc cagaagcagc tcctggctga tgttgcccaa 1150
 gctcttgaca ttggccctgc cgggtccactg atgggtgttg tccagtatgg 1200
 agacaacctt gctactcact ttaacctcaa gacacacacg aattctcgag 1250
 atctgaagac agccatagag aaaattactc agagaggagg actttctaata 1300
 gtaggtcggg ccattctcctt tgtgaccaag aacttctttt ccaaagccaa 1350
 tggaaacaga agcggggctc ccaatgtggt ggtggtgatg gtggatggct 1400
 ggcccacgga caaagtggag gaggttcaa gacttgcgag agagtcagga 1450
 atcaacattt tcttcacac cattgaaggt gctgctgaaa atgagaagca 1500
 gtatgtggtg gagcccaact ttgcaaaca ggccgtgtgc agaacaacg 1550
 gcttctactc gctccacgtg cagagctggt ttggcctcca caagacctg 1600
 cagcctctgg tgaagcgggt ctgcgacact gaccgcctgg cctgcagcaa 1650
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 gtgtggggac gggcaacttc cgcaccgtcc tccagtttgt gaccaacctc 1750
 accaaagagt ttgagatttc cgacacggac acgcgcatcg gggccgtgca 1800
 gtacacctac gaacagcggc tggagtttgg gttcgacaag tacagcagca 1850
 agcctgacat cctcaacgcc atcaagaggg tgggctactg gagtgggtggc 1900
 accagcacgg gggctgccat caacttcgcc ctggagcagc tcttcaagaa 1950
 gtccaagccc aacaagagga agttaatgat cctcatcacc gacgggaggt 2000
 cctacgacga cgtccggatc ccagccatgg ctgccatct gaagggagt 2050
 atcacctatg cgataggcgt tgctgggct gcccaagagg agctagaagt 2100
 cattgccact cccccgcca gagaccactc cttctttgtg gacgagtttg 2150
 acaacctcca tcagtatgtc ccaggatca tccagaacat ttgtacagag 2200

ttcaactcac agcctcggaa ctgaattcag agcaggcaga gcaccagcaa 2250
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 acgcacggtg catcaagtct tgggcagggc atggagaaac aaatgtcttg 2350
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 aaagatgatc acaaacgtat agaatgagcc aaaaggctac atcatgttga 2450
 ggggtgctgga gattttacat tttgacaatt gttttcaaaa taaatgttcg 2500
 gaatacagtg cagcccttac gacaggctta cgtagagctt ttgtgagatt 2550
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 ttttgtcatg acaatgtagg aattgctgaa ttaaattgtt agaaggatga 2650
 aaaataaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2700
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2750
 aaaaaaaaaa aaaaaaaaaa aag 2773

<210> 150
 <211> 678
 <212> PRT
 <213> Homo Sapien

<400> 150
 Met Arg Thr Val Val Leu Thr Met Lys Ala Ser Val Ile Glu Met
 1 5 10 15
 Phe Leu Val Leu Leu Val Thr Gly Val His Ser Asn Lys Glu Thr
 20 25 30
 Ala Lys Lys Ile Lys Arg Pro Lys Phe Thr Val Pro Gln Ile Asn
 35 40 45
 Cys Asp Val Lys Ala Gly Lys Ile Ile Asp Pro Glu Phe Ile Val
 50 55 60
 Lys Cys Pro Ala Gly Cys Gln Asp Pro Lys Tyr His Val Tyr Gly
 65 70 75
 Thr Asp Val Tyr Ala Ser Tyr Ser Ser Val Cys Gly Ala Ala Val
 80 85 90
 His Ser Gly Val Leu Asp Asn Ser Gly Gly Lys Ile Leu Val Arg
 95 100 105
 Lys Val Ala Gly Gln Ser Gly Tyr Lys Gly Ser Tyr Ser Asn Gly
 110 115 120
 Val Gln Ser Leu Ser Leu Pro Arg Trp Arg Glu Ser Phe Ile Val
 125 130 135
 Leu Glu Ser Lys Pro Lys Lys Gly Val Thr Tyr Pro Ser Ala Leu

Thr Tyr Ser Ser	140	Ala Gln Ala Gly Glu Thr	150
Ser Lys Ser Pro	155	Ala Gln Ala Gly Glu Thr	165
Thr Lys Ala Tyr	170	Pro Gly Thr Thr Ala Gln	180
Gln Arg Pro Pro	175	Val Thr Val Ala Val Ala	195
Met Gln Leu Leu	185	Pro Ser Ala Ala Ser Thr	210
Leu Pro Arg Pro	200	Gly His Arg Ser Gln Glu	225
Thr Ser Ile Pro	215	Thr Ser Ser Gln Asn Arg	240
Arg Pro Gln Ser	230	Gln Asp Pro Ser Gly Ala	255
Thr Ala Thr Tyr	235	Val Ser Leu Gly Leu Val	270
Pro Gly Ile Gln	245	Leu Glu Pro Val Ser Leu	285
Arg Gln Arg Gln	250	Gly Asp Pro Asn Cys Lys	290
Thr Tyr Thr Gln	255	Ile Asp Leu Ser Phe Leu	300
Ser Ser Gln Asn	260	Ile Gln Lys Gln Leu	315
Thr Thr Ala Thr	265	Ile Gly Pro Ala Gly Pro	330
Thr Tyr Thr Gln	270	Asn Pro Ala Thr His Phe	345
Ser Ser Gln Asn	275	Asp Leu Lys Thr Ala Ile	360
Thr Tyr Thr Gln	280	Gly Arg Gly Gly Leu Ser	375
Ser Phe Leu Ile	285	Asn Val Gly Arg Ala	390
Thr Thr Ser Ile	290	Thr Lys Asn Phe Phe Ser	405
Gly Lys Arg Arg	295	Val Met Val Asp Gly Trp	420
Phe Arg Phe Arg	300	Pro Asn Val Val Val	435
Thr Thr Ser Ile	305	Val Met Val Asp Gly Trp	450
Gly Lys Arg Arg	310	Pro Asn Val Val Val	465
Phe Arg Phe Arg	315	Val Met Val Asp Gly Trp	480
Thr Thr Ser Ile	320	Pro Asn Val Val Val	495
Gly Lys Arg Arg	325	Val Met Val Asp Gly Trp	510
Phe Arg Phe Arg	330	Pro Asn Val Val Val	525
Thr Thr Ser Ile	335	Val Met Val Asp Gly Trp	540
Gly Lys Arg Arg	340	Pro Asn Val Val Val	555
Phe Arg Phe Arg	345	Val Met Val Asp Gly Trp	570
Thr Thr Ser Ile	350	Pro Asn Val Val Val	585
Gly Lys Arg Arg	355	Val Met Val Asp Gly Trp	600
Phe Arg Phe Arg	360	Pro Asn Val Val Val	615
Thr Thr Ser Ile	365	Val Met Val Asp Gly Trp	630
Gly Lys Arg Arg	370	Pro Asn Val Val Val	645
Phe Arg Phe Arg	375	Val Met Val Asp Gly Trp	660
Thr Thr Ser Ile	380	Pro Asn Val Val Val	675
Gly Lys Arg Arg	385	Val Met Val Asp Gly Trp	690
Phe Arg Phe Arg	390	Pro Asn Val Val Val	705
Thr Thr Ser Ile	395	Val Met Val Asp Gly Trp	720
Gly Lys Arg Arg	400	Pro Asn Val Val Val	735
Phe Arg Phe Arg	405	Val Met Val Asp Gly Trp	750
Thr Thr Ser Ile	410	Pro Asn Val Val Val	765
Gly Lys Arg Arg	415	Val Met Val Asp Gly Trp	780
Phe Arg Phe Arg	420	Pro Asn Val Val Val	795
Thr Thr Ser Ile	425	Val Met Val Asp Gly Trp	810
Gly Lys Arg Arg	430	Pro Asn Val Val Val	825
Phe Arg Phe Arg	435	Val Met Val Asp Gly Trp	840

Glu Lys Gln Tyr Val Val Glu Pro Asn Phe Ala Asn Lys Ala Val	440	445	450
Cys Arg Thr Asn Gly Phe Tyr Ser Leu His Val Gln Ser Trp Phe	455	460	465
Gly Leu His Lys Thr Leu Gln Pro Leu Val Lys Arg Val Cys Asp	470	475	480
Thr Asp Arg Leu Ala Cys Ser Lys Thr Cys Leu Asn Ser Ala Asp	485	490	495
Ile Gly Phe Val Ile Asp Gly Ser Ser Ser Val Gly Thr Gly Asn	500	505	510
Phe Arg Thr Val Leu Gln Phe Val Thr Asn Leu Thr Lys Glu Phe	515	520	525
Glu Ile Ser Asp Thr Asp Thr Arg Ile Gly Ala Val Gln Tyr Thr	530	535	540
Tyr Glu Gln Arg Leu Glu Phe Gly Phe Asp Lys Tyr Ser Ser Lys	545	550	555
Pro Asp Ile Leu Asn Ala Ile Lys Arg Val Gly Tyr Trp Ser Gly	560	565	570
Gly Thr Ser Thr Gly Ala Ala Ile Asn Phe Ala Leu Glu Gln Leu	575	580	585
Phe Lys Lys Ser Lys Pro Asn Lys Arg Lys Leu Met Ile Leu Ile	590	595	600
Thr Asp Gly Arg Ser Tyr Asp Asp Val Arg Ile Pro Ala Met Ala	605	610	615
Ala His Leu Lys Gly Val Ile Thr Tyr Ala Ile Gly Val Ala Trp	620	625	630
Ala Ala Gln Glu Glu Leu Glu Val Ile Ala Thr His Pro Ala Arg	635	640	645
Asp His Ser Phe Phe Val Asp Glu Phe Asp Asn Leu His Gln Tyr	650	655	660
Val Pro Arg Ile Ile Gln Asn Ile Cys Thr Glu Phe Asn Ser Gln	665	670	675

Pro Arg Asn

<210> 151

<211> 1759

<212> DNA

<213> Homo Sapien

<400> 151

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gcgtgctgc	ctcagcacca	tggctgcgca	ggccccgacg	gctccgcgcc	150
agatcccccc	cactacagtt	tttctctgac	tctaattgat	gcactggaca	200
ccttgctgat	tttggggaat	gtctcagaat	tccaaagagt	ggttgaagtg	250
ctccaggaca	gcgtggactt	tgatattgat	gtgaacgcct	ctgtgtttga	300
aacaaacatt	cgagtggtag	gaggactcct	gtctgctcat	ctgctctcca	350
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cagatgtaca	aggggactgt	gtccatgcca	gtcttccagt	ccttgagggc	900
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gaattctaca	acattcctca	gggatacaca	gtggagaagc	gagaggggcta	1050
cccacttcgg	ccagaactta	ttgaaagcgc	aatgtacctc	taccgtgcc	1100
cgggggatcc	caccctccta	gaactcggaa	gagatgctgt	ggaatccatt	1150
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gggtccacct	tcgacgoggt	gatcaccccc	tatggggagt	gcatcctggg	1350
ggctgggggg	tacatcttca	acacagaagc	tcaccccatc	gaccttgccg	1400
ccctgcactg	ctgccagagg	ctgaaggaag	agcagtggga	ggtgaggagac	1450
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aaacactggt agttcggggc catgggaacc tccagcaagg ccaggaacac 1550
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 cagaagggtcc cacttctcag ctgccccagt cagcccttca cctccaagtt 1650
 ggcattactg ggacagggtt tccatagactc ctcataacca ctggataatt 1700
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 atcataaaa 1759

<210> 152
 <211> 541
 <212> PRT
 <213> Homo Sapien

<400> 152
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 Leu Pro Gln His His Gly Ala Pro Gly Pro Asp Gly Ser Ala Pro
 20 25 30
 Asp Pro Ala His Tyr Ser Phe Ser Leu Thr Leu Ile Asp Ala Leu
 35 40 45
 Asp Thr Leu Leu Ile Leu Gly Asn Val Ser Glu Phe Gln Arg Val
 50 55 60
 Val Glu Val Leu Gln Asp Ser Val Asp Phe Asp Ile Asp Val Asn
 65 70 75
 Ala Ser Val Phe Glu Thr Asn Ile Arg Val Val Gly Gly Leu Leu
 80 85 90
 Ser Ala His Leu Leu Ser Lys Lys Ala Gly Val Glu Val Glu Ala
 95 100 105
 Gly Trp Pro Cys Ser Gly Pro Leu Leu Arg Met Ala Glu Glu Ala
 110 115 120
 Ala Arg Lys Leu Leu Pro Ala Phe Gln Thr Pro Thr Gly Met Pro
 125 130 135
 Tyr Gly Thr Val Asn Leu Leu His Gly Val Asn Pro Gly Glu Thr
 140 145 150
 Pro Val Thr Cys Thr Ala Gly Ile Gly Thr Phe Ile Val Glu Phe
 155 160 165
 Ala Thr Leu Ser Ser Leu Thr Gly Asp Pro Val Phe Glu Asp Val
 170 175 180
 Ala Arg Val Ala Leu Met Arg Leu Trp Glu Ser Arg Ser Asp Ile
 185 190 195
 Gly Leu Val Gly Asn His Ile Asp Val Leu Thr Gly Lys Trp Val

Ala Gln Asp Ala Gly Ile Gly Ala Gly Val Asp Ser Tyr Phe Glu	215	220	225
Tyr Leu Val Lys Gly Ala Ile Leu Leu Gln Asp Lys Lys Leu Met	230	235	240
Ala Met Phe Leu Glu Tyr Asn Lys Ala Ile Arg Asn Tyr Thr Arg	245	250	255
Phe Asp Asp Trp Tyr Leu Trp Val Gln Met Tyr Lys Gly Thr Val	260	265	270
Ser Met Pro Val Phe Gln Ser Leu Glu Ala Tyr Trp Pro Gly Leu	275	280	285
Gln Ser Leu Ile Gly Asp Ile Asp Asn Ala Met Arg Thr Phe Leu	290	295	300
Asn Tyr Tyr Thr Val Trp Lys Gln Phe Gly Gly Leu Pro Glu Phe	305	310	315
Tyr Asn Ile Pro Gln Gly Tyr Thr Val Glu Lys Arg Glu Gly Tyr	320	325	330
Pro Leu Arg Pro Glu Leu Ile Glu Ser Ala Met Tyr Leu Tyr Arg	335	340	345
Ala Thr Gly Asp Pro Thr Leu Leu Glu Leu Gly Arg Asp Ala Val	350	355	360
Glu Ser Ile Glu Lys Ile Ser Lys Val Glu Cys Gly Phe Ala Thr	365	370	375
Ile Lys Asp Leu Arg Asp His Lys Leu Asp Asn Arg Met Glu Ser	380	385	390
Phe Phe Leu Ala Glu Thr Val Lys Tyr Leu Tyr Leu Leu Phe Asp	395	400	405
Pro Thr Asn Phe Ile His Asn Asn Gly Ser Thr Phe Asp Ala Val	410	415	420
Ile Thr Pro Tyr Gly Glu Cys Ile Leu Gly Ala Gly Gly Tyr Ile	425	430	435
Phe Asn Thr Glu Ala His Pro Ile Asp Leu Ala Ala Leu His Cys	440	445	450
Cys Gln Arg Leu Lys Glu Glu Gln Trp Glu Val Glu Asp Leu Met	455	460	465
Arg Glu Phe Tyr Ser Leu Lys Arg Ser Arg Ser Lys Phe Gln Lys	470	475	480
Asn Thr Val Ser Ser Gly Pro Trp Glu Pro Pro Ala Arg Pro Gly	485	490	495

Thr Leu Phe Ser Pro Glu Asn His Asp Gln Ala Arg Glu Arg Lys
500 505 510

Pro Ala Lys Gln Lys Val Pro Leu Leu Ser Cys Pro Ser Gln Pro
515 520 525

Phe Thr Ser Lys Leu Ala Leu Leu Gly Gln Val Phe Leu Asp Ser
530 535 540

Ser

<210> 153

<211> 1486

<212> DNA

<213> Homo Sapien

<400> 153

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gatgggaggg aaagtgaaga aaacagaaaa ggagagggac agaggccaga 100
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cactcacctg ttcttgcccc tgggtgtcct gacaggtctc tgctccccct 200
ttaacctgga tgaacatcac ccacgcctat tcccagggcc accagaagct 250
gaatttgat acagtgtctt acaacatgtt gggggtggac agcgatggat 300
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cacttaggtg actaccaact gggaaattca tctcatcctg ctgtgaatat 450
gcacctgggg atgtctctgt tagagacaga tggatgatgg ggattcatgg 500
tgagctaagg agaggggtgg ggcagtgtct ctgaaggtcc ataaaaagaa 550
aaagagaagt gtggttaagg aaaatggtct gtgtggagg gtcaaggagt 600
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gcctccttca actgggagca tgttctgagg gtgccctccc aagcctggga 700
gtaactattt ccccatccc caggcctgtg cccctctctg gtctcgtgct 750
tgtggcagct ctgtcttcag ttctgggata tgtgccctg tggatgcttc 800
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aaggctgagt acttggttcc cagaaggaga tactgggtgg gaaaaagatg 900
gggcaaagcg gtatgatgcc tggcaaagg cctgcatggc tatcctcatt 950
gtacctaata gtgcttgcaa aagctccatg tttcctaaca gattcagact 1000

cctggccagg tgtggtggcc cacacctgta attctagcac tttgggaggc 1050
 caaggtgggc agatcacttg aggtcaggag ttcaagacca gcctggccaa 1100
 catggtgaaa ctccatctct actaaaaaaaa aaaaaatata aaaattagct 1150
 ggggtgcgcta gtgcatgcct gtaatctcat ctactcgga ggctaagaca 1200
 ggagactctc acttcaaccc aggaggtgga ggttgcggtg agccaagatt 1250
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 aaaataataa taataataat tcagactcct tatcaggagt ccatgatctg 1350
 gcctggcaca gtaactcatg cctgtaatcc caacattttg ggaggccaac 1400
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 agaaagaccc catctctaaa taaatgtttt aaaaat 1486

<210> 154
 <211> 124
 <212> PRT
 <213> Homo Sapien

<400> 154
 Met Glu Leu Pro Phe Val Thr His Leu Phe Leu Pro Leu Val Phe
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 Leu Thr Gly Leu Cys Ser Pro Phe Asn Leu Asp Glu His His Pro
 20 25 30
 Arg Leu Phe Pro Gly Pro Pro Glu Ala Glu Phe Gly Tyr Ser Val
 35 40 45
 Leu Gln His Val Gly Gly Gly Gln Arg Trp Met Leu Val Gly Ala
 50 55 60
 Pro Trp Asp Gly Pro Ser Gly Asp Arg Arg Gly Asp Val Tyr Arg
 65 70 75
 Cys Pro Val Gly Gly Ala His Asn Ala Pro Cys Ala Lys Gly His
 80 85 90
 Leu Gly Asp Tyr Gln Leu Gly Asn Ser Ser His Pro Ala Val Asn
 95 100 105
 Met His Leu Gly Met Ser Leu Leu Glu Thr Asp Gly Asp Gly Gly
 110 115 120
 Phe Met Val Ser

<210> 155
 <211> 2530
 <212> DNA
 <213> Homo Sapien

<400> 155

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 gctctgatct cagctgacag tgccctcggg gaccaaaca gcctggcagg 150
 gtctcacttt gttgccagc ctggagttca gtgccatgat catggtttac 200
 tgcagccttg acctcctggg ttcaagcga cctgctgagt agctgggact 250
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 atttttcacc cctgggtgga ccctcattga tggatctgaa atggaatggg 350
 attttatgtg gcacttgaga aaggtacccc ggattgtcag tgaaaggact 400
 ttccatctca ccagccccgc atttgaggca gatgctaaga tgatggtaaa 450
 tacagtgtgt ggcatcgaat gccagaaaga actcccaact ccagccttt 500
 ctgaattgga ggattatctt tcctatgaga ctgtctttga gaatggcacc 550
 cgaaccttaa ccaggtgaa agttcaagat ttggttcttg agccgactca 600
 aaatatcacc acaaaggag tatctgttag gagaaagaga caggtgtatg 650
 gcaccgacag caggttcagc atcttgaca aaaggttctt aaccaatttc 700
 cctttcagca cagctgtgaa gctttccacg ggctgtagtg gcattctcat 750
 ttcccctcag catgttctaa ctgctgccca ctgtgttcat gatggaaagg 800
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 aataaaagtg gaggaagaa acgtcgaggt tctaagagga gcaggagaga 900
 agctagtggg ggtgaccaa gagagggtac cagagagcat ctgcaggaga 950
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 gccgaaggga ggccttcctt tcagtggacc cgggtcaaga ataccacat 1050
 tccgaagggc tgggcacgag gaggcattgg ggacgctacc ttggactatg 1100
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 tcgggctcca ccggttcggg ggtctatctg cgtctgaaag atccagacaa 1350
 aaagaattgg aagcgcaaaa tcattgcggt ctactcaggg caccagtggg 1400
 tggatgtcca cgggggtcag aaggactaca acgttgctgt tcgcatcact 1450

Thr Gly Ser Gly Val Tyr Leu Arg Leu Lys Asp Pro Asp Lys Lys	335	340	345
	350	355	360
Asn Trp Lys Arg Lys Ile Ile Ala Val Tyr Ser Gly His Gln Trp	365	370	375
Val Asp Val His Gly Val Gln Lys Asp Tyr Asn Val Ala Val Arg	380	385	390
Ile Thr Pro Leu Lys Tyr Ala Gln Ile Cys Leu Trp Ile His Gly	395	400	405
Asn Asp Ala Asn Cys Ala Tyr Gly	410		

<210> 157
 <211> 2883
 <212> DNA
 <213> Homo Sapien

<400> 157
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 ggctccgggg cggcccgtta ggccagtgcg ccgcgcgctcg ccccgccaggc 200
 cccggcccgcc agcatggagc caccgggacg ccggcggggc cgcgcgcagc 250
 cgccgctggt gctgccgctc tcgctgttag cgctgctcgc gctgctggga 300
 ggcggcgggc ggcggcgccg cgcggcgctg cccgccggct gcaagcacga 350
 tgggcggccc cgaggggctg gcagggcggc gggcgccgcc gagggcaagg 400
 tgggtgtgag cagcctggaa ctgcgcgagg tcctgcccc agatactctg 450
 cccaaccgca cggtcaccct gattctgagt aacaataaga tatccgagct 500
 gaagaatggc tcattttctg ggttaagtct ccttgaaaga ttggacctcc 550
 gaaacaatct tattagtagt atagatccag gtgccttctg gggactgtca 600
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ctgatccaac aggtgttagg tgttctggtt tagtgtgagc actcaataaa 2850
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<210> 158
<211> 616
<212> PRT
<213> Homo Sapien

<400> 158
Met Glu Pro Pro Gly Arg Arg Arg Gly Arg Ala Gln Pro Pro Leu
1 5 10 15
Leu Leu Pro Leu Ser Leu Leu Ala Leu Leu Ala Leu Leu Gly Gly
20 25 30
Gly Gly Gly Gly Gly Ala Ala Ala Leu Pro Ala Gly Cys Lys His
35 40 45
Asp Gly Arg Pro Arg Gly Ala Gly Arg Ala Ala Gly Ala Ala Glu
50 55 60
Gly Lys Val Val Cys Ser Ser Leu Glu Leu Ala Gln Val Leu Pro
65 70 75
Pro Asp Thr Leu Pro Asn Arg Thr Val Thr Leu Ile Leu Ser Asn
80 85 90
Asn Lys Ile Ser Glu Leu Lys Asn Gly Ser Phe Ser Gly Leu Ser
95 100 105
Leu Leu Glu Arg Leu Asp Leu Arg Asn Asn Leu Ile Ser Ser Ile
110 115 120
Asp Pro Gly Ala Phe Trp Gly Leu Ser Ser Leu Lys Arg Leu Asp
125 130 135
Leu Thr Asn Asn Arg Ile Gly Cys Leu Asn Ala Asp Ile Phe Arg
140 145 150

Gly	Leu	Thr	Asn	Leu	Val	Arg	Leu	Asn	Leu	Ser	Gly	Asn	Leu	Phe	155	160	165
Ser	Ser	Leu	Ser	Gln	Gly	Thr	Phe	Asp	Tyr	Leu	Ala	Ser	Leu	Arg	170	175	180
Ser	Leu	Glu	Phe	Gln	Thr	Glu	Tyr	Leu	Leu	Cys	Asp	Cys	Asn	Ile	185	190	195
Leu	Trp	Met	His	Arg	Trp	Val	Lys	Glu	Lys	Asn	Ile	Thr	Val	Arg	200	205	210
Asp	Thr	Arg	Cys	Val	Tyr	Pro	Lys	Ser	Leu	Gln	Ala	Gln	Pro	Val	215	220	225
Thr	Gly	Val	Lys	Gln	Glu	Leu	Leu	Thr	Cys	Asp	Pro	Pro	Leu	Glu	230	235	240
Leu	Pro	Ser	Phe	Tyr	Met	Thr	Pro	Ser	His	Arg	Gln	Val	Val	Phe	245	250	255
Glu	Gly	Asp	Ser	Leu	Pro	Phe	Gln	Cys	Met	Ala	Ser	Tyr	Ile	Asp	260	265	270
Gln	Asp	Met	Gln	Val	Leu	Trp	Tyr	Gln	Asp	Gly	Arg	Ile	Val	Glu	275	280	285
Thr	Asp	Glu	Ser	Gln	Gly	Ile	Phe	Val	Glu	Lys	Asn	Met	Ile	His	290	295	300
Asn	Cys	Ser	Leu	Ile	Ala	Ser	Ala	Leu	Thr	Ile	Ser	Asn	Ile	Gln	305	310	315
Ala	Gly	Ser	Thr	Gly	Asn	Trp	Gly	Cys	His	Val	Gln	Thr	Lys	Arg	320	325	330
Gly	Asn	Asn	Thr	Arg	Thr	Val	Asp	Ile	Val	Val	Leu	Glu	Ser	Ser	335	340	345
Ala	Gln	Tyr	Cys	Pro	Pro	Glu	Arg	Val	Val	Asn	Asn	Lys	Gly	Asp	350	355	360
Phe	Arg	Trp	Pro	Arg	Thr	Leu	Ala	Gly	Ile	Thr	Ala	Tyr	Leu	Gln	365	370	375
Cys	Thr	Arg	Asn	Thr	His	Gly	Ser	Gly	Ile	Tyr	Pro	Gly	Asn	Pro	380	385	390
Gln	Asp	Glu	Arg	Lys	Ala	Trp	Arg	Arg	Cys	Asp	Arg	Gly	Gly	Phe	395	400	405
Trp	Ala	Asp	Asp	Asp	Tyr	Ser	Arg	Cys	Gln	Tyr	Ala	Asn	Asp	Val	410	415	420
Thr	Arg	Val	Leu	Tyr	Met	Phe	Asn	Gln	Met	Pro	Leu	Asn	Leu	Thr	425	430	435
Asn	Ala	Val	Ala	Thr	Ala	Arg	Gln	Leu	Leu	Ala	Tyr	Thr	Val	Glu			

440	445	450
Ala Ala Asn Phe Ser Asp Lys Met Asp Val Ile Phe Val Ala Glu		
455	460	465
Met Ile Glu Lys Phe Gly Arg Phe Thr Lys Glu Glu Lys Ser Lys		
470	475	480
Glu Leu Gly Asp Val Met Val Asp Ile Ala Ser Asn Ile Met Leu		
485	490	495
Ala Asp Glu Arg Val Leu Trp Leu Ala Gln Arg Glu Ala Lys Ala		
500	505	510
Cys Ser Arg Ile Val Gln Cys Leu Gln Arg Ile Ala Thr Tyr Arg		
515	520	525
Leu Ala Gly Gly Ala His Val Tyr Ser Thr Tyr Ser Pro Asn Ile		
530	535	540
Ala Leu Glu Ala Tyr Val Ile Lys Ser Thr Gly Phe Thr Gly Met		
545	550	555
Thr Cys Thr Val Phe Gln Lys Val Ala Ala Ser Asp Arg Thr Gly		
560	565	570
Leu Ser Asp Tyr Gly Arg Arg Asp Pro Glu Gly Asn Leu Asp Lys		
575	580	585
Gln Leu Ser Phe Lys Cys Asn Val Ser Asn Thr Phe Ser Ser Leu		
590	595	600
Ala Leu Lys Val Cys Tyr Ile Leu Gln Ser Phe Lys Thr Ile Tyr		
605	610	615
Ser		

<210> 159
 <211> 1917
 <212> DNA
 <213> Homo Sapien

<400> 159
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 gcttcggctc tggtgtctgt tgttcctcct gccctcagcg cagggccgcc 100
 agaaggagtc aggttcaaaa tggaaagtat ttattgacca aattaacagg 150
 tctttggaga attacgaacc atgttcaagt caaaactgca gctgctacca 200
 tgggtgtcata gaagaggatc taactccttt ccgaggaggc atctccagga 250
 agatgatggc agaggtagtc agacggaagc tagggacca ctatcagatc 300
 actaagaaca gactgtaccg ggaaaatgac tgcattgtcc cctcaagggtg 350

tagtgggtgtt gagcacttta ttttggaagt gatcggggcgt ctccctgaca 400
 tggagatggg gatcaatgta cgagattatc ctcaggttcc taaatggatg 450
 gagcctgcc a tcccagtctt ctcttctcagt aagacatcag agtaccatga 500
 tatcatgtat cctgcttggga catttttggga aggggggacct gctgtttggc 550
 caatttatcc tacaggtctt ggacgggtggg acctcttcag agaagatctg 600
 gtaaggtcag cagcacagtg gccatggaaa aagaaaaact ctacagcata 650
 tttccgagga tcaaggacaa gtccagaacg agatcctctc attcttctgt 700
 ctcggaaaaa cccaaaactt gttgatgcag aatacaccaa aaaccaggcc 750
 tggaaatcta tgaaagatac cttaggaaaag ccagctgcta aggatgtcca 800
 tcttgtggat cactgcaa at acaagtatct gtttaatttt cgaggcgtag 850
 ctgcaagttt ccggttttaa cacctcttcc tgtgtggctc acttgttttc 900
 catgttgggtg atgagtggct agaattcttc tatccacagc tgaagccatg 950
 gggttactat atcccagtca aaacagatct ctccaatgtc caagagctgt 1000
 tacaatttgt aaaagcaa at gatgatgtag ctcaagagat tgctgaaagg 1050
 ggaagccagt ttattaggaa ccatttgcag atggatgaca tcacctgtta 1100
 ctgggagaa cctcttgagt aatactctaa attcctgtct tataatgtaa 1150
 cgagaaggaa aggttatgat caaattatc ccaaaatgtt gaaaactgaa 1200
 ctatagtagt catcatagga ccatagtcct ctttgtggca acagatctca 1250
 gatatactac ggtgagaagc ttaccataag cttggctcct ataccttgaa 1300
 tatctgctat caagccaa at acctggtttt cttatcatg ctgcaccag 1350
 agcaactctt gagaaagatt taaaatgtgt ctaatacact gatatgaagc 1400
 agttcaactt tttggatgaa taaggaccag aaatcgtgag atgtggattt 1450
 tgaacccaac tctaccttc attttcttaa gaccaatcac agcttgtgcc 1500
 tcagatcatc cacctgtgtg agtccatcac tgtgaaattg actgtgtcca 1550
 tgtgatgatg cccttctgct cattatttgg agcagaaa at tcgtcatttg 1600
 gaagtagtac aactcattgc tggaattgtg aaattattca aggcgtgatc 1650
 tctgtcaact tattttaatg taggaaaccc tatgggggtt atgaaaaata 1700
 cttggggatc attctctgaa tggctaaagg aagcggtagc catgccatgc 1750
 aatgatgtag gagttctctt ttgtaaaacc ataaactctg ttactcagga 1800

ggtttctata atgccacata gaaagaggcc aattgcatga gtaattattg 1850
 caattggatt tcagggttccc tttttgtgcc ttcatgccct acttcttaat 1900
 gcctctctaa agccaaa 1917

<210> 160
 <211> 392
 <212> PRT
 <213> Homo Sapien

<400> 160
 Met Glu Trp Trp Ala Ser Ser Pro Leu Arg Leu Trp Leu Leu Leu
 1 5 10 15
 Phe Leu Leu Pro Ser Ala Gln Gly Arg Gln Lys Glu Ser Gly Ser
 20 25 30
 Lys Trp Lys Val Phe Ile Asp Gln Ile Asn Arg Ser Leu Glu Asn
 35 40 45
 Tyr Glu Pro Cys Ser Ser Gln Asn Cys Ser Cys Tyr His Gly Val
 50 55 60
 Ile Glu Glu Asp Leu Thr Pro Phe Arg Gly Gly Ile Ser Arg Lys
 65 70 75
 Met Met Ala Glu Val Val Arg Arg Lys Leu Gly Thr His Tyr Gln
 80 85 90
 Ile Thr Lys Asn Arg Leu Tyr Arg Glu Asn Asp Cys Met Phe Pro
 95 100 105
 Ser Arg Cys Ser Gly Val Glu His Phe Ile Leu Glu Val Ile Gly
 110 115 120
 Arg Leu Pro Asp Met Glu Met Val Ile Asn Val Arg Asp Tyr Pro
 125 130 135
 Gln Val Pro Lys Trp Met Glu Pro Ala Ile Pro Val Phe Ser Phe
 140 145 150
 Ser Lys Thr Ser Glu Tyr His Asp Ile Met Tyr Pro Ala Trp Thr
 155 160 165
 Phe Trp Glu Gly Gly Pro Ala Val Trp Pro Ile Tyr Pro Thr Gly
 170 175 180
 Leu Gly Arg Trp Asp Leu Phe Arg Glu Asp Leu Val Arg Ser Ala
 185 190 195
 Ala Gln Trp Pro Trp Lys Lys Lys Asn Ser Thr Ala Tyr Phe Arg
 200 205 210
 Gly Ser Arg Thr Ser Pro Glu Arg Asp Pro Leu Ile Leu Leu Ser
 215 220 225
 Arg Lys Asn Pro Lys Leu Val Asp Ala Glu Tyr Thr Lys Asn Gln

Ala Trp Lys Ser Met Lys Asp Thr Leu Gly Lys Pro Ala Ala Lys	245	250	255
Asp Val His Leu Val Asp His Cys Lys Tyr Lys Tyr Leu Phe Asn	260	265	270
Phe Arg Gly Val Ala Ala Ser Phe Arg Phe Lys His Leu Phe Leu	275	280	285
Cys Gly Ser Leu Val Phe His Val Gly Asp Glu Trp Leu Glu Phe	290	295	300
Phe Tyr Pro Gln Leu Lys Pro Trp Val His Tyr Ile Pro Val Lys	305	310	315
Thr Asp Leu Ser Asn Val Gln Glu Leu Leu Gln Phe Val Lys Ala	320	325	330
Asn Asp Asp Val Ala Gln Glu Ile Ala Glu Arg Gly Ser Gln Phe	335	340	345
Ile Arg Asn His Leu Gln Met Asp Asp Ile Thr Cys Tyr Trp Glu	350	355	360
Asn Leu Leu Ser Glu Tyr Ser Lys Phe Leu Ser Tyr Asn Val Thr	365	370	375
Arg Arg Lys Gly Tyr Asp Gln Ile Ile Pro Lys Met Leu Lys Thr	380	385	390
Glu Leu			

<210> 161
 <211> 2095
 <212> DNA
 <213> Homo Sapien

<400> 161
 ccgagcacag gagattgcct gcgttttagga ggtggctgcg ttgtgggaaa 50
 agctatcaag gaagaaattg ccaaaccatg tctttttttc tgttttcaga 100
 gtagttcaca acagatctga gtgttttaaat taagcatgga atacagaaaa 150
 caacaaaaaa cttaagcttt aatttcattc ggaattccac agttttctta 200
 gctccctgga cccggttgac ctgttggttc ttcccgtggt ctgtctctatc 250
 acgtggtgct ctccgactac tcaccccgag tgtaaagaac cttcggctcg 300
 cgtgcttctg agctgctgtg gatggcctcg gctctctgga ctgtccttcc 350
 gagtaggatg tcaactgagat ccctcaaag gagcctcctg ctgtgtgtcac 400
 tcttgagttt ctttgtgatg tggtacctca gccttcccca ctacaatgtg 450

caagataaaa aggatagtga atcattcttt acatgcaaac attttccagt 1950
tacttaactg atcagtttat tattgataca tcactccatt aatgtaaagt 2000
cataggtcat tattgcatat cagtaatctc ttggactttg ttaaataattt 2050
tactgtggta atatagagaa gaattaaagc aagaaaatct gaaaa 2095

<210> 162

<211> 331

<212> PRT

<213> Homo Sapien

<400> 162

Met	Ala	Ser	Ala	Leu	Trp	Thr	Val	Leu	Pro	Ser	Arg	Met	Ser	Leu	1	5	10	15
Arg	Ser	Leu	Lys	Trp	Ser	Leu	Leu	Leu	Leu	Ser	Leu	Leu	Ser	Phe	20	25	30	
Phe	Val	Met	Trp	Tyr	Leu	Ser	Leu	Pro	His	Tyr	Asn	Val	Ile	Glu	35	40	45	
Arg	Val	Asn	Trp	Met	Tyr	Phe	Tyr	Glu	Tyr	Glu	Pro	Ile	Tyr	Arg	50	55	60	
Gln	Asp	Phe	His	Phe	Thr	Leu	Arg	Glu	His	Ser	Asn	Cys	Ser	His	65	70	75	
Gln	Asn	Pro	Phe	Leu	Val	Ile	Leu	Val	Thr	Ser	His	Pro	Ser	Asp	80	85	90	
Val	Lys	Ala	Arg	Gln	Ala	Ile	Arg	Val	Thr	Trp	Gly	Glu	Lys	Lys	95	100	105	
Ser	Trp	Trp	Gly	Tyr	Glu	Val	Leu	Thr	Phe	Phe	Leu	Leu	Gly	Gln	110	115	120	
Glu	Ala	Glu	Lys	Glu	Asp	Lys	Met	Leu	Ala	Leu	Ser	Leu	Glu	Asp	125	130	135	
Glu	His	Leu	Leu	Tyr	Gly	Asp	Ile	Ile	Arg	Gln	Asp	Phe	Leu	Asp	140	145	150	
Thr	Tyr	Asn	Asn	Leu	Thr	Leu	Lys	Thr	Ile	Met	Ala	Phe	Arg	Trp	155	160	165	
Val	Thr	Glu	Phe	Cys	Pro	Asn	Ala	Lys	Tyr	Val	Met	Lys	Thr	Asp	170	175	180	
Thr	Asp	Val	Phe	Ile	Asn	Thr	Gly	Asn	Leu	Val	Lys	Tyr	Leu	Leu	185	190	195	
Asn	Leu	Asn	His	Ser	Glu	Lys	Phe	Phe	Thr	Gly	Tyr	Pro	Leu	Ile	200	205	210	
Asp	Asn	Tyr	Ser	Tyr	Arg	Gly	Phe	Tyr	Gln	Lys	Thr	His	Ile	Ser	215	220	225	

Tyr	Gln	Glu	Tyr	Pro	Phe	Lys	Val	Phe	Pro	Pro	Tyr	Cys	Ser	Gly
				230					235					240
Leu	Gly	Tyr	Ile	Met	Ser	Arg	Asp	Leu	Val	Pro	Arg	Ile	Tyr	Glu
				245					250					255
Met	Met	Gly	His	Val	Lys	Pro	Ile	Lys	Phe	Glu	Asp	Val	Tyr	Val
				260					265					270
Gly	Ile	Cys	Leu	Asn	Leu	Leu	Lys	Val	Asn	Ile	His	Ile	Pro	Glu
				275					280					285
Asp	Thr	Asn	Leu	Phe	Phe	Leu	Tyr	Arg	Ile	His	Leu	Asp	Val	Cys
				290					295					300
Gln	Leu	Arg	Arg	Val	Ile	Ala	Ala	His	Gly	Phe	Ser	Ser	Lys	Glu
				305					310					315
Ile	Ile	Thr	Phe	Trp	Gln	Val	Met	Leu	Arg	Asn	Thr	Thr	Cys	His
				320					325					330

Tyr

<210> 163
 <211> 1706
 <212> DNA
 <213> Homo Sapien

<400> 163
 catttctgaa actaatcgtg tcagaattga ctttgaaaag cattgctttt 50
 tacagaagta tattaacttt ttaggagtaa tttctagttt ggattgtaat 100
 atgaaataat ttaaaagggc ttcgctcata tataggaaaa tcgcatatgg 150
 tcctagtatt aaattcttat tgcttactga tttttttgag ttaagagttg 200
 ttatatgcta gaatatgagg atgtgaatat aaataagaga agaaaaaaga 250
 ataaagtaga ttgagtctcc aattttatgt aagcttcaga agaactgggt 300
 tgtttacatg caagcttata gttgaaatat ttttcaggaa ttacatgaat 350
 gacagtcttc gaaccaatgt gtttgttcga tttcaaccag agactatagc 400
 atgtgcttgc atctaccttg cagctagagc acttcagatt ccgttgccaa 450
 ctcgtcccca ttggtttctt ctttttggtg ctacagaaga ggaaatccag 500
 gaaatctgca tagaaacact taggctttat accagaaaaa agccaaacta 550
 tgaattactg gaaaaagaag tagaaaaaag aaaagtagcc ttacaagaag 600
 ccaaattaaa agcaaaggga ttgaatccgg atggaactcc agccctttca 650
 accctgggtg gattttctcc agcctccaag ccatcatcac caagagaagt 700

Leu Tyr Thr Arg Lys Lys Pro Asn Tyr Glu Leu Leu Glu Lys Glu	50	55	60
	65	70	75
Val Glu Lys Arg Lys Val Ala Leu Gln Glu Ala Lys Leu Lys Ala	80	85	90
Lys Gly Leu Asn Pro Asp Gly Thr Pro Ala Leu Ser Thr Leu Gly	95	100	105
Gly Phe Ser Pro Ala Ser Lys Pro Ser Ser Pro Arg Glu Val Lys	110	115	120
Ala Glu Glu Lys Ser Pro Ile Ser Ile Asn Val Lys Thr Val Lys	125	130	135
Lys Glu Pro Glu Asp Arg Gln Gln Ala Ser Lys Ser Pro Tyr Asn	140	145	150
Gly Val Arg Lys Asp Ser Lys Arg Ser Arg Asn Ser Arg Ser Ala	155	160	165
Ser Arg Ser Arg Ser Arg Thr Arg Ser Arg Ser Arg Ser His Thr	170	175	180
Pro Arg Arg His Tyr Asn Asn Arg Arg Ser Arg Ser Gly Thr Tyr	185	190	195
Ser Ser Arg Ser Arg Ser Arg Ser Arg Ser His Ser Glu Ser Pro	200	205	210
Arg Arg His His Asn His Gly Ser Pro His Leu Lys Ala Lys His	215	220	225
Thr Arg Asp Asp Leu Lys Ser Ser Asn Arg His Gly His Lys Arg	230	235	240
Lys Lys Ser Arg Ser Arg Ser Gln Ser Lys Ser Arg Asp His Ser	245	250	255
Asp Ala Ala Lys Lys His Arg His Glu Arg Gly His His Arg Asp	260	265	270
Arg Arg Glu Arg Ser Arg Ser Phe Glu Arg Ser His Lys Ser Lys	275	280	285
His His Gly Gly Ser Arg Ser Gly His Gly Arg His Arg Arg	290	295	

<210> 165
 <211> 2571
 <212> DNA
 <213> Homo Sapien

<400> 165
 ggttcctaca tcctctcatc tgagaatcag agagcataat cttcttacgg 50

gcccgtagatt tattaacgtg gcttaatctg aagggttctca gtcaaattct 100
 ttgtgatcta ctgattgtgg gggcatggca aggttttgctt aaaggagctt 150
 ggctgggttg ggccttgta gctgacagaa ggtggccagg gagaatgcag 200
 cacactgctc ggagaatgaa ggcgcttctg ttgctgggtc tgccttggtc 250
 cagtctgct aactacattg acaatgtggg caacctgcac ttcctgtatt 300
 cagaactctg taaaggtgcc tcccactacg gcctgaccaa agataggaag 350
 aggcgctcac aagatggctg tccagacggc tgtgcgagcc tcacagccac 400
 ggctccctcc ccagaggttt ctgcagctgc caccatctcc ttaatgacag 450
 acgagcctgg cctagacaac cctgcctacg tgtcctcggc agaggacggg 500
 cagccagcaa tcagcccagt ggactctggc cggagcaacc gaactagggc 550
 acggcccttt gagagatcca ctattagaag cagatcattt aaaaaataa 600
 atcgagcttt gagtgttctt cgaaggacaa agagcgggag tgcagttgcc 650
 aaccatgccg accagggcag ggaaaattct gaaaacacca ctgcccctga 700
 agtctttcca aggttgtagc acctgattcc agatggtgaa attaccagca 750
 tcaagatcaa tcgagtagat cccagtgaag gcctctctat taggctgggtg 800
 ggaggtagcg aaacccact ggtccatctc attatccaac acatttatcg 850
 tgatgggggtg atcgccagag acggccggct actgccagga gacatcattc 900
 taaaggtcaa cgggatggac atcagcaatg tccctcacia ctacgctgtg 950
 cgtctcctgc ggcagccctg ccaggtgctg tggctgactg tgatgcgtga 1000
 acagaagtgc cgcagcagga acaatggaca ggccccggat gcctacagac 1050
 cccgagatga cagctttcat gtgattctca acaaaagtag ccccgaggag 1100
 cagcttgga taaaactggt gcgcaagggt gatgagcctg gggttttcat 1150
 cttcaatgtg ctggatggcg gtgtggcata tcgacatggt cagcttgagg 1200
 agaatgaccg tgtgttagcc atcaatggac atgatcttcg atatggcagc 1250
 ccagaaagtg cggtcatct gattcaggcc agtgaaagac gtgttcacct 1300
 cgtcgtgtcc cgccagggtc ggcagcggag cctgacatc tttcaggaag 1350
 ccggctggaa cagcaatggc agctgggtccc cagggccagg ggagaggagc 1400
 aacactccca agcccccca tcctacaatt acttgtcatg agaaggtggt 1450
 aaatatccaa aaagaccccg gtgaatctct cggcatgacc gtcgcagggg 1500

gagcatcaca tagagaatgg gatttgccta tctatgtcat cagtgttgag 1550
cccggaggag tcataagcag agatggaaga ataaaaacag gtgacatttt 1600
gttgaatgtg gatgggggtcg aactgacaga ggtcagccgg agtgaggcag 1650
tggcattatt gaaaagaaca tcatcctoga tagtactcaa agctttggaa 1700
gtcaaagagt atgagcccca ggaagactgc agcagcccag cagccctgga 1750
ctccaaccac aacatggccc caccagtgga ctgggtcccca tcctgggtca 1800
tgtggctgga attaccacgg tgcttgata actgtaaaga tattgtatta 1850
cgaagaaaca cagctggaag tctgggcttc tgcattgtag gaggttatga 1900
agaatacaat ggaaacaaac cttttttcat caaatccatt gttgaaggaa 1950
caccagcata caatgatgga agaattagat gtggtgatat tcttcttgct 2000
gtcaatggta gaagtacatc aggaatgata catgcttgct tggcaagact 2050
gctgaaagaa cttaaaggaa gaattactct aactattgtt tcttggcctg 2100
gcactttttt atagaatcaa tgatgggtca gaggaaaaca gaaaaatcac 2150
aaataggcta agaagttgaa aactatatt tatcttgta gtttttatat 2200
ttaaagaaag aatacattgt aaaaatgtca ggaaaagtat gatcatctaa 2250
tgaaagccag ttacacctca gaaaatatga ttccaaaaaa attaaaacta 2300
ctagtttttt ttcagtgtgg aggatttctc attactctac aacattgttt 2350
atattttttc tattcaataa aaagccctaa aacaactaaa atgattgatt 2400
tgtatacccc actgaattca agctgattta aatttaaaat ttggtatatg 2450
ctgaagtctg ccaaggggtac attatggcca tttttaattt acagctaaaa 2500
tattttttta aatgcattgc tgagaaacgt tgctttcatc aaacaagaat 2550
aaatattttt cagaagttaa a 2571

<210> 166
<211> 632
<212> PRT
<213> Homo Sapien

<400> 166
Met Lys Ala Leu Leu Leu Leu Val Leu Pro Trp Leu Ser Pro Ala
1 5 10 15
Asn Tyr Ile Asp Asn Val Gly Asn Leu His Phe Leu Tyr Ser Glu
20 25 30
Leu Cys Lys Gly Ala Ser His Tyr Gly Leu Thr Lys Asp Arg Lys
35 40 45

Pro Glu Ser Ala	Ala His Leu Ile Gln	Ala Ser Glu Arg Arg	Val
350	355		360
His Leu Val Val	Ser Arg Gln Val Arg	Gln Arg Ser Pro Asp	Ile
365	370		375
Phe Gln Glu Ala	Gly Trp Asn Ser Asn	Gly Ser Trp Ser Pro	Gly
380	385		390
Pro Gly Glu Arg	Ser Asn Thr Pro Lys	Pro Leu His Pro Thr	Ile
395	400		405
Thr Cys His Glu	Lys Val Val Asn Ile	Gln Lys Asp Pro Gly	Glu
410	415		420
Ser Leu Gly Met	Thr Val Ala Gly Gly	Ala Ser His Arg Glu	Trp
425	430		435
Asp Leu Pro Ile	Tyr Val Ile Ser Val	Glu Pro Gly Gly Val	Ile
440	445		450
Ser Arg Asp Gly	Arg Ile Lys Thr Gly	Asp Ile Leu Leu Asn	Val
455	460		465
Asp Gly Val Glu	Leu Thr Glu Val Ser	Arg Ser Glu Ala Val	Ala
470	475		480
Leu Leu Lys Arg	Thr Ser Ser Ser Ile	Val Leu Lys Ala Leu	Glu
485	490		495
Val Lys Glu Tyr	Glu Pro Gln Glu Asp	Cys Ser Ser Pro Ala	Ala
500	505		510
Leu Asp Ser Asn	His Asn Met Ala Pro	Pro Ser Asp Trp Ser	Pro
515	520		525
Ser Trp Val Met	Trp Leu Glu Leu Pro	Arg Cys Leu Tyr Asn	Cys
530	535		540
Lys Asp Ile Val	Leu Arg Arg Asn Thr	Ala Gly Ser Leu Gly	Phe
545	550		555
Cys Ile Val Gly	Gly Tyr Glu Glu Tyr	Asn Gly Asn Lys Pro	Phe
560	565		570
Phe Ile Lys Ser	Ile Val Glu Gly Thr	Pro Ala Tyr Asn Asp	Gly
575	580		585
Arg Ile Arg Cys	Gly Asp Ile Leu Leu	Ala Val Asn Gly Arg	Ser
590	595		600
Thr Ser Gly Met	Ile His Ala Cys Leu	Ala Arg Leu Leu Lys	Glu
605	610		615
Leu Lys Gly Arg	Ile Thr Leu Thr Ile	Val Ser Trp Pro Gly	Thr
620	625		630

Phe Leu

<210> 167
<211> 735
<212> DNA
<213> Homo Sapien

<400> 167
gggaaagcca tttcgaaaac ccattctatac aaactatata ttttcatttc 50
tgctgctagc tgccttgggc ctcaaatatt tcattctggt ttctgacttt 100
caagttatat accgtggaat ggagttgatc ccaaccataa catcgtggag 150
ggttttaatt ttggtggtag ccctcaccga attctgggtg ggctttcttt 200
gcagaggatt ccacettcaa aatcatgaac tctggctggt gatcaaaaga 250
gaatttggtat tctactctaa aagtcaatat aggacttggc aaaagaagct 300
agcagaagac tcaacctggc ctcccataaa caggacagat tattcaggtg 350
atggcaaaaa tggattctac atcaacggag gctatgaaag ccatgaacag 400
attccaaaaa gaaaactcaa attgggaggg caaccacag aacagcattt 450
ctggggcagg ctgtaatcag aattgtcgtc gtacatgctc aacagcattg 500
cttttttccc caaaattaac acattgtgga gaagtgatga tactctcccc 550
ttacctttcc tctctccatt caagcattca aagtatatatt tcaatgaatt 600
aaaccttgca gcaagggacc ttagataggg ttattctgac tgtatgcttt 650
accaatgaga gaaaaaaatg catttcctgt atcatccttt tcaataaact 700
gtattcattt tgaaaaaaaa aaaaaaaaaa aaaaa 735

<210> 168
<211> 115
<212> PRT
<213> Homo Sapien

<400> 168
Met Glu Leu Ile Pro Thr Ile Thr Ser Trp Arg Val Leu Ile Leu
1 5 10 15
Val Val Ala Leu Thr Gln Phe Trp Cys Gly Phe Leu Cys Arg Gly
20 25 30
Phe His Leu Gln Asn His Glu Leu Trp Leu Leu Ile Lys Arg Glu
35 40 45
Phe Gly Phe Tyr Ser Lys Ser Gln Tyr Arg Thr Trp Gln Lys Lys
50 55 60
Leu Ala Glu Asp Ser Thr Trp Pro Pro Ile Asn Arg Thr Asp Tyr

	65		70		75
Ser Gly Asp Gly Lys Asn Gly Phe Tyr Ile Asn Gly Gly Tyr Glu					
	80		85		90
Ser His Glu Gln Ile Pro Lys Arg Lys Leu Lys Leu Gly Gly Gln					
	95		100		105
Pro Thr Glu Gln His Phe Trp Ala Arg Leu					
	110		115		

<210> 169
 <211> 2846
 <212> DNA
 <213> Homo Sapien

<400> 169
 cgctcgggca ccagccgagg caaggatgga gctgggttgc tggacgcagt 50
 tggggctcac ttttcttcag ctccttctca tctcgtcctt gccaaagagag 100
 tacacagtca ttaatgaagc ctgccctgga gcagagtgga atatcatgtg 150
 tcgggagtgct tgtgaatatg atcagattga gtgcgtctgc cccggaaaga 200
 gggaagtcgt ggggtatacc atcccttgct gcaggaatga ggagaatgag 250
 tgtgactcct gcctgatcca cccaggttgt accatctttg aaaactgcaa 300
 gagctgccga aatggctcat ggggggggtac cttggatgac ttctatgtga 350
 aggggttcta ctgtgcagag tgccgagcag gctgggtacgg aggagactgc 400
 atgcgatgtg gccaggttct gcgagcccca aagggtcaga ttttgttgga 450
 aagctatccc cttaaagctc actgtgaatg gaccattcat gctaaacctg 500
 ggtttgtcat ccaactaaga tttgtcatgt tgagtctgga gtttgactac 550
 atgtgccagt atgactatgt tgagggtcgt gatggagaca accgcatgg 600
 ccagatcatc aagcgtgtct gtggcaacga gcggccagct cctatccaga 650
 gcataggatc ctcaactcac gtctctctcc actccgatgg ctccaagaat 700
 tttgacgggt tccatgccat ttatgaggag atcacagcat gtcctcatc 750
 cccttggttc catgaaggca cgtgcgtcct tgacaaggct ggatcttaca 800
 agtgtgcctg cttggcaggc tatactgggc agcgtgtga aaatctcctt 850
 gaagaaagaa actgctcaga ccctgggggc ccagtcaatg ggtaccagaa 900
 aataacaggg ggcctgggc ttatcaacgg acgcatgct aaaattggca 950
 ccgtgggtgtc tttcttttgt acaactcct atgttcttag tggcaatgag 1000
 aaaagaactt gccagcagaa tggagagtgg tcagggaac agcccatctg 1050

cataaaagcc tgccgagaac caaagatttc agacctggtg agaaggagag 1100
 ttcttccgat gcaggttcag tcaagggaga caccattaca ccagctatac 1150
 tcagcggcct tcagcaagca gaaactgcag agtgccccta ccaagaagcc 1200
 agcccttccc tttggagatc tgcccatggg ataccaacat ctgcataccc 1250
 agctccagta tgagtgcac tcaccttct accgccgcct gggcagcagc 1300
 aggaggacat gtctgaggac tgggaagtgg agtgggcggg caccatcctg 1350
 catccctatc tgcgggaaaa ttgagaacat cactgctcca aagaccaag 1400
 ggttgcgctg gccgtggcag gcagccatct acaggaggac cagcggggtg 1450
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<210> 170
 <211> 720
 <212> PRT
 <213> Homo Sapien

<400> 170
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 Glu Ala Cys Pro Gly Ala Glu Trp Asn Ile Met Cys Arg Glu Cys
 35 40 45
 Cys Glu Tyr Asp Gln Ile Glu Cys Val Cys Pro Gly Lys Arg Glu
 50 55 60
 Val Val Gly Tyr Thr Ile Pro Cys Cys Arg Asn Glu Glu Asn Glu
 65 70 75
 Cys Asp Ser Cys Leu Ile His Pro Gly Cys Thr Ile Phe Glu Asn
 80 85 90
 Cys Lys Ser Cys Arg Asn Gly Ser Trp Gly Gly Thr Leu Asp Asp
 95 100 105
 Phe Tyr Val Lys Gly Phe Tyr Cys Ala Glu Cys Arg Ala Gly Trp
 110 115 120
 Tyr Gly Gly Asp Cys Met Arg Cys Gly Gln Val Leu Arg Ala Pro
 125 130 135
 Lys Gly Gln Ile Leu Leu Glu Ser Tyr Pro Leu Asn Ala His Cys
 140 145 150
 Glu Trp Thr Ile His Ala Lys Pro Gly Phe Val Ile Gln Leu Arg
 155 160 165
 Phe Val Met Leu Ser Leu Glu Phe Asp Tyr Met Cys Gln Tyr Asp
 170 175 180
 Tyr Val Glu Val Arg Asp Gly Asp Asn Arg Asp Gly Gln Ile Ile
 185 190 195

485										490				495		
Glu	Arg	Thr	Val	Val	Val	Ala	Ala	His	Cys	Val	Thr	Asp	Leu	Gly		
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Lys	Val	Thr	Met	Ile	Lys	Thr	Ala	Asp	Leu	Lys	Val	Val	Leu	Gly		
				515					520					525		
Lys	Phe	Tyr	Arg	Asp	Asp	Asp	Arg	Asp	Glu	Lys	Thr	Ile	Gln	Ser		
				530					535					540		
Leu	Gln	Ile	Ser	Ala	Ile	Ile	Leu	His	Pro	Asn	Tyr	Asp	Pro	Ile		
				545					550					555		
Leu	Leu	Asp	Ala	Asp	Ile	Ala	Ile	Leu	Lys	Leu	Leu	Asp	Lys	Ala		
				560					565					570		
Arg	Ile	Ser	Thr	Arg	Val	Gln	Pro	Ile	Cys	Leu	Ala	Ala	Ser	Arg		
				575					580					585		
Asp	Leu	Ser	Thr	Ser	Phe	Gln	Glu	Ser	His	Ile	Thr	Val	Ala	Gly		
				590					595					600		
Trp	Asn	Val	Leu	Ala	Asp	Val	Arg	Ser	Pro	Gly	Phe	Lys	Asn	Asp		
				605					610					615		
Thr	Leu	Arg	Ser	Gly	Val	Val	Ser	Val	Val	Asp	Ser	Leu	Leu	Cys		
				620					625					630		
Glu	Glu	Gln	His	Glu	Asp	His	Gly	Ile	Pro	Val	Ser	Val	Thr	Asp		
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Asn	Met	Phe	Cys	Ala	Ser	Trp	Glu	Pro	Thr	Ala	Pro	Ser	Asp	Ile		
				650					655					660		
Cys	Thr	Ala	Glu	Thr	Gly	Gly	Ile	Ala	Ala	Val	Ser	Phe	Pro	Gly		
				665					670					675		
Arg	Ala	Ser	Pro	Glu	Pro	Arg	Trp	His	Leu	Met	Gly	Leu	Val	Ser		
				680					685					690		
Trp	Ser	Tyr	Asp	Lys	Thr	Cys	Ser	His	Arg	Leu	Ser	Thr	Ala	Phe		
				695					700					705		
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<210> 171

<211> 2128

<212> DNA

<213> Homo Sapien

<400> 171

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<210> 172
<211> 322
<212> PRT
<213> Homo Sapien

<400> 172
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35 40 45
Ser Thr Cys Val Ala Phe Ser Leu Val Ala Ser Val Gly Ala Trp
50 55 60
Thr Gly Ser Met Gly Asn Trp Ser Met Phe Thr Trp Cys Phe Cys
65 70 75
Phe Ser Val Thr Leu Ile Ile Leu Ile Val Glu Leu Cys Gly Leu
80 85 90
Gln Ala Arg Phe Pro Leu Ser Trp Arg Asn Phe Pro Ile Thr Phe
95 100 105
Ala Cys Tyr Ala Ala Leu Phe Cys Leu Ser Ala Ser Ile Ile Tyr
110 115 120
Pro Thr Thr Tyr Val Gln Phe Leu Ser His Gly Arg Ser Arg Asp
125 130 135
His Ala Ile Ala Ala Thr Phe Phe Ser Cys Ile Ala Cys Val Ala
140 145 150

Tyr Ala Thr Glu Val Ala Trp Thr Arg Ala Arg Pro Gly Glu Ile
155 160 165

Thr Gly Tyr Met Ala Thr Val Pro Gly Leu Leu Lys Val Leu Glu
170 175 180

Thr Phe Val Ala Cys Ile Ile Phe Ala Phe Ile Ser Asp Pro Asn
185 190 195

Leu Tyr Gln His Gln Pro Ala Leu Glu Trp Cys Val Ala Val Tyr
200 205 210

Ala Ile Cys Phe Ile Leu Ala Ala Ile Ala Ile Leu Leu Asn Leu
215 220 225

Gly Glu Cys Thr Asn Val Leu Pro Ile Pro Phe Pro Ser Phe Leu
230 235 240

Ser Gly Leu Ala Leu Leu Ser Val Leu Leu Tyr Ala Thr Ala Leu
245 250 255

Val Leu Trp Pro Leu Tyr Gln Phe Asp Glu Lys Tyr Gly Gly Gln
260 265 270

Pro Arg Arg Ser Arg Asp Val Ser Cys Ser Arg Ser His Ala Tyr
275 280 285

Tyr Val Cys Ala Trp Asp Arg Arg Leu Ala Val Ala Ile Leu Thr
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Ala Ile Asn Leu Leu Ala Tyr Val Ala Asp Leu Val His Ser Ala
305 310 315

His Leu Val Phe Val Lys Val
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<210> 173
<211> 3680
<212> DNA
<213> Homo Sapien

<400> 173
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<210> 174

<211> 335

<212> PRT

<213> Homo Sapien

<400> 174

Met	Phe	Leu	Ala	Thr	Leu	Ser	Phe	Leu	Leu	Pro	Phe	Ala	His	Pro	1	5	10	15
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Ser	Leu	Ala	Gln	Val	Asn	Leu	Ser	Pro	Phe	Ser	His	Pro	Lys	Val	35	40	45	
His	Met	Asp	Pro	Asn	Tyr	Cys	His	Pro	Ser	Thr	Ser	Leu	His	Leu	50	55	60	
Cys	Ser	Leu	Ala	Trp	Ser	Phe	Thr	Arg	Leu	Leu	His	Pro	Pro	Leu	65	70	75	
Ser	Pro	Gly	Ile	Ser	Gln	Val	Val	Lys	Asp	His	Val	Thr	Lys	Pro	80	85	90	
Thr	Ala	Met	Ala	Gln	Gly	Arg	Val	Ala	His	Leu	Ile	Glu	Trp	Lys	95	100	105	
Gly	Trp	Ser	Lys	Pro	Ser	Asp	Ser	Pro	Ala	Ala	Leu	Glu	Ser	Ala	110	115	120	
Phe	Ser	Ser	Tyr	Ser	Asp	Leu	Ser	Glu	Gly	Glu	Gln	Glu	Ala	Arg	125	130	135	
Phe	Ala	Ala	Gly	Val	Ala	Glu	Gln	Phe	Ala	Ile	Ala	Glu	Ala	Lys	140	145	150	
Leu	Arg	Ala	Trp	Ser	Ser	Val	Asp	Gly	Glu	Asp	Ser	Thr	Asp	Asp	155	160	165	
Ser	Tyr	Asp	Glu	Asp	Phe	Ala	Gly	Gly	Met	Asp	Thr	Asp	Met	Ala	170	175	180	

Gly	Gln	Leu	Pro	Leu	Gly	Pro	His	Leu	Gln	Asp	Leu	Phe	Thr	Gly
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His	Arg	Phe	Ser	Arg	Pro	Val	Arg	Gln	Gly	Ser	Val	Glu	Pro	Glu
				200					205					210
Ser	Asp	Cys	Ser	Gln	Thr	Val	Ser	Pro	Asp	Thr	Leu	Cys	Ser	Ser
				215					220					225
Leu	Cys	Ser	Leu	Glu	Asp	Gly	Leu	Leu	Gly	Ser	Pro	Ala	Arg	Leu
				230					235					240
Ala	Ser	Gln	Leu	Leu	Gly	Asp	Glu	Leu	Leu	Leu	Ala	Lys	Leu	Pro
				245					250					255
Pro	Ser	Arg	Glu	Ser	Ala	Phe	Arg	Ser	Leu	Gly	Pro	Leu	Glu	Ala
				260					265					270
Gln	Asp	Ser	Leu	Tyr	Asn	Ser	Pro	Leu	Thr	Glu	Ser	Cys	Leu	Ser
				275					280					285
Pro	Ala	Glu	Glu	Glu	Pro	Ala	Pro	Cys	Lys	Asp	Cys	Gln	Pro	Leu
				290					295					300
Cys	Pro	Pro	Leu	Thr	Gly	Ser	Trp	Glu	Arg	Gln	Arg	Gln	Ala	Ser
				305					310					315
Asp	Leu	Ala	Ser	Ser	Gly	Val	Val	Ser	Leu	Asp	Glu	Asp	Glu	Ala
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Glu	Pro	Glu	Glu	Gln										
				335										

<210> 175
 <211> 2084
 <212> DNA
 <213> Homo Sapien

<400> 175
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 aactaaaaga tttcaccatt acagccctgc ctcataacta aataataaaa 1650
 attattccac caaaaaattc taaaacaatg aagatgactc tttactgctc 1700
 tgctgaagc cctagtacca taattcaaga ttgcattttc ttaaatgaaa 1750
 attgaaaggg tgctttttta agaaaatttg acttaaagct aaaaagagga 1800
 catagcccag agtttctggt attgggaaat tgaggcaata gaaatgacag 1850
 acctgtattc tagtacgtta taattttcta gatcagcaca cacatgatca 1900
 gccactgag ttatgaagct gacaatgact gcattcaacg gggccatggc 1950

aggaaagctg accctaccca ggaaagtaat agcttcttta aaagtcttca 2000
aaggttttgg gaattttaac ttgtcttaat atatcttagg cttcaattat 2050
ttgggtgcct taaaaactca atgagaatca tggt 2084

<210> 176
<211> 334
<212> PRT
<213> Homo Sapien

<400> 176
Met Leu Ala Leu Ala Lys Ile Leu Leu Ile Ser Thr Leu Phe Tyr
1 5 10 15
Ser Leu Leu Ser Gly Ser His Gly Lys Glu Asn Gln Asp Ile Asn
20 25 30
Thr Thr Gln Asn Ile Ala Glu Val Phe Lys Thr Met Glu Asn Lys
35 40 45
Pro Ile Ser Leu Glu Ser Glu Ala Asn Leu Asn Ser Asp Lys Glu
50 55 60
Asn Ile Thr Thr Ser Asn Leu Lys Ala Ser His Ser Pro Pro Leu
65 70 75
Asn Leu Pro Asn Asn Ser His Gly Ile Thr Asp Phe Ser Ser Asn
80 85 90
Ser Ser Ala Glu His Ser Leu Gly Ser Leu Lys Pro Thr Ser Thr
95 100 105
Ile Ser Thr Ser Pro Pro Leu Ile His Ser Phe Val Ser Lys Val
110 115 120
Pro Trp Asn Ala Pro Ile Ala Asp Glu Asp Leu Leu Pro Ile Ser
125 130 135
Ala His Pro Asn Ala Thr Pro Ala Leu Ser Ser Glu Asn Phe Thr
140 145 150
Trp Ser Leu Val Asn Asp Thr Val Lys Thr Pro Asp Asn Ser Ser
155 160 165
Ile Thr Val Ser Ile Leu Ser Ser Glu Pro Thr Ser Pro Ser Val
170 175 180
Thr Pro Leu Ile Val Glu Pro Ser Gly Trp Leu Thr Thr Asn Ser
185 190 195
Asp Ser Phe Thr Gly Phe Thr Pro Tyr Gln Glu Lys Thr Thr Leu
200 205 210
Gln Pro Thr Leu Lys Phe Thr Asn Asn Ser Lys Leu Phe Pro Asn
215 220 225
Thr Ser Asp Pro Gln Lys Glu Asn Arg Asn Thr Gly Ile Val Phe

	230		235		240
Gly Ala Ile Leu	Gly Ala Ile Leu	Gly Val Ser Leu Leu Thr	Leu		
	245		250		255
Val Gly Tyr Leu	Leu Cys Gly Lys Arg	Lys Thr Asp Ser Phe	Ser		
	260		265		270
His Arg Arg Leu	Tyr Asp Asp Arg Asn	Glu Pro Val Leu Arg	Leu		
	275		280		285
Asp Asn Ala Pro	Glu Pro Tyr Asp Val	Ser Phe Gly Asn Ser	Ser		
	290		295		300
Tyr Tyr Asn Pro	Thr Leu Asn Asp Ser	Ala Met Pro Glu Ser	Glu		
	305		310		315
Glu Asn Ala Arg	Asp Gly Ile Pro Met	Asp Asp Ile Pro Pro	Leu		
	320		325		330
Arg Thr Ser Val					

<210> 177
 <211> 1964
 <212> DNA
 <213> Homo Sapien

<400> 177
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 caaattccga ttactgttgc tgttgacttt gtgcctgaca gtggttgggt 200
 gggccaccag taactacttc gtgggtgccca ttcaagagat tcctaaagca 250
 aaggagttca tggctaattt ccataagacc ctcatcttgg ggaagggaaa 300
 aactctgact aatgaagcat ccacgaagaa ggtagaactt gacaactgtc 350
 cttctgtgtc tccttacctc agaggccaga gcaagctcat tttcaaacca 400
 gatctcactt tggaagaggt acaggcagaa aatcccaaag tgtccagagg 450
 ccggtatcgc cctcaggaat gtaaagcttt acagaggggt gccatcctcg 500
 ttccccaccg gaacagagag aaacacctga tgtacctgct ggaacatctg 550
 catcccttcc tgcagaggca gcagctggat tatggcatct acgtcatcca 600
 ccaggctgaa ggtaaaaagt ttaatcgagc caaactcttg aatgtgggct 650
 atctagaagc cctcaaggaa gaaaattggg actgctttat attccacgat 700
 gtggacctgg tacccgagaa tgactttaac ctttacaagt gtgaggagca 750

tcccaagcat ctggtggttg gcaggaacag cactgggtac aggttacgtt 800
acagtggata ttttgggggt gttactgcc taagcagaga gcagtttttc 850
aaggtgaatg gattctctaa caactactgg ggatggggag gcgaagacga 900
tgacctcaga ctcaggggttg agctccaaag aatgaaaatt tcccggcccc 950
tgctgaagt gggtaaatat acaatggtct tccacactag agacaaaggc 1000
aatgaggtga acgcagaacg gatgaagctc ttacaccaag tgtcacgagt 1050
ctggagaaca gatgggttga gtagttgttc ttataaatta gtatctgttg 1100
aacacaatcc tttatatatc aacatcacag tggatttctg gtttgggtgca 1150
tgacctgga tcttttggtg atgtttggaa gaactgattc tttgtttgca 1200
ataatttttg cctagagact tcaaatagta gcacacatta agaacctgtt 1250
acagctcatt gttgagctga atttttcctt tttgtatttt cttagcagag 1300
ctcctggtga tgtagagtat aaaacagttg taacaagaca gctttcttag 1350
tcattttgat catgaggggt aaatattgta atatggatac ttgaaggact 1400
ttatataaaa ggatgactca aaggataaaa tgaacgctat ttgaggactc 1450
tggttgaagg agatttattt aaatttgaag taatatatta tgggataaaa 1500
ggccacagga aataagactg ctgaatgtct gagagaacca gagttgttct 1550
cgtccaaggt agaaaggtag gaagatacaa tactgttatt catttatcct 1600
gtacaatcat ctgtgaagtg gtggtgtcag gtgagaaggc gtccacaaaa 1650
gaggggagaa aaggcgacga atcaggacac agtgaacttg ggaatgaaga 1700
ggtagcagga ggggtggagt tcggctgcaa aggcagcagt agctgagctg 1750
gttgcaggtg ctgatagcct tcaggggagg acctgcccag gtatgccttc 1800
cagtgatgcc caccagagaa tacattctct attagttttt aaagagtttt 1850
tgtaaaatga ttttgtacaa gtaggatatg aattagcagt ttacaagttt 1900
acatatatac taataataaa tatgtctatc aaatacctct gtagtaaaat 1950
gtgaaaaagc aaaa 1964

<210> 178

<211> 344

<212> PRT

<213> Homo Sapien

<400> 178

Met	Gly	Phe	Asn	Leu	Thr	Phe	His	Leu	Ser	Tyr	Lys	Phe	Arg	Leu
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				20					25					30			
Ser	Asn	Tyr	Phe	Val	Gly	Ala	Ile	Gln	Glu	Ile	Pro	Lys	Ala	Lys			
				35					40					45			
Glu	Phe	Met	Ala	Asn	Phe	His	Lys	Thr	Leu	Ile	Leu	Gly	Lys	Gly			
				50					55					60			
Lys	Thr	Leu	Thr	Asn	Glu	Ala	Ser	Thr	Lys	Lys	Val	Glu	Leu	Asp			
				65					70					75			
Asn	Cys	Pro	Ser	Val	Ser	Pro	Tyr	Leu	Arg	Gly	Gln	Ser	Lys	Leu			
				80					85					90			
Ile	Phe	Lys	Pro	Asp	Leu	Thr	Leu	Glu	Glu	Val	Gln	Ala	Glu	Asn			
				95					100					105			
Pro	Lys	Val	Ser	Arg	Gly	Arg	Tyr	Arg	Pro	Gln	Glu	Cys	Lys	Ala			
				110					115					120			
Leu	Gln	Arg	Val	Ala	Ile	Leu	Val	Pro	His	Arg	Asn	Arg	Glu	Lys			
				125					130					135			
His	Leu	Met	Tyr	Leu	Leu	Glu	His	Leu	His	Pro	Phe	Leu	Gln	Arg			
				140					145					150			
Gln	Gln	Leu	Asp	Tyr	Gly	Ile	Tyr	Val	Ile	His	Gln	Ala	Glu	Gly			
				155					160					165			
Lys	Lys	Phe	Asn	Arg	Ala	Lys	Leu	Leu	Asn	Val	Gly	Tyr	Leu	Glu			
				170					175					180			
Ala	Leu	Lys	Glu	Glu	Asn	Trp	Asp	Cys	Phe	Ile	Phe	His	Asp	Val			
				185					190					195			
Asp	Leu	Val	Pro	Glu	Asn	Asp	Phe	Asn	Leu	Tyr	Lys	Cys	Glu	Glu			
				200					205					210			
His	Pro	Lys	His	Leu	Val	Val	Gly	Arg	Asn	Ser	Thr	Gly	Tyr	Arg			
				215					220					225			
Leu	Arg	Tyr	Ser	Gly	Tyr	Phe	Gly	Gly	Val	Thr	Ala	Leu	Ser	Arg			
				230					235					240			
Glu	Gln	Phe	Phe	Lys	Val	Asn	Gly	Phe	Ser	Asn	Asn	Tyr	Trp	Gly			
				245					250					255			
Trp	Gly	Gly	Glu	Asp	Asp	Asp	Leu	Arg	Leu	Arg	Val	Glu	Leu	Gln			
				260					265					270			
Arg	Met	Lys	Ile	Ser	Arg	Pro	Leu	Pro	Glu	Val	Gly	Lys	Tyr	Thr			
				275					280					285			
Met	Val	Phe	His	Thr	Arg	Asp	Lys	Gly	Asn	Glu	Val	Asn	Ala	Glu			
				290					295					300			
Arg	Met	Lys	Leu	Leu	His	Gln	Val	Ser	Arg	Val	Trp	Arg	Thr	Asp			

	305		310		315									
Gly	Leu	Ser	Ser	Cys	Ser	Tyr	Lys	Leu	Val	Ser	Val	Glu	His	Asn
	320								325					330
Pro	Leu	Tyr	Ile	Asn	Ile	Thr	Val	Asp	Phe	Trp	Phe	Gly	Ala	
	335								340					

<210> 179
 <211> 2567
 <212> DNA
 <213> Homo Sapien

<400> 179
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 tctcccgttc cgggccccgc aatggcccag gcagtgtggt cgcgcctcgg 150
 ccgcatactc tggcttgccct gcctcctgcc ctgggccccg gcaggggtgg 200
 ccgcaggcct gtatgaactc aatctcacca ccgatatgcc tgccaccacg 250
 ggagcggtag tgaccatctc ggccagcctg gtggccaagg acaacggcag 300
 cctggccctg cccgctgacg cccacctcta ccgcttcac tggatccaca 350
 ccccgtggt gcttactggc aagatggaga aggggtctcag ctccaccatc 400
 cgtgtggtcg gccacgtgcc cggggaattc ccggtctctg tctgggtcac 450
 tgccgctgac tgctggatgt gccagcctgt ggccaggggc tttgtggtcc 500
 tccccatcac agagtctctc gtgggggacc ttgttgtcac ccagaacact 550
 tccctaccct ggcccagctc ctatctcact aagaccgtcc tgaaagtctc 600
 ctctctctc caccgaccga gcaacttct caagaccgcc ttgtttctct 650
 acagctggga cttcggggac gggaccaga tggtgactga agactccgtg 700
 gtctattata actattccat catcgggacc ttcaccgtga agctcaaagt 750
 ggtggcggag tgggaagagg tggagccgga tgccacgagg gctgtgaagc 800
 agaagaccgg ggacttctcc gcctcgtga agctgcagga aacccttcga 850
 ggcatacaag tgttggggcc caccctaatt cagaccttc aaaagatgac 900
 cgtgaccttg aacttcctgg ggagccctcc tctgactgtg tgctggcgtc 950
 tcaagcctga gtgcctcccg ctggaggaag gggagtgcc cctgtgtcc 1000
 gtggccagca cagcgtacaa cctgaccac accttcagg accctgggga 1050
 ctactgcttc agcatccggg ccgagaatat catcagcaag acacatcagt 1100

accacaagat ccaggtgtgg cctccagaa tccagccggc tgtctttgct 1150
 ttcccatgtg ctacacttat cactgtgatg ttggccttca tcatgtacat 1200
 gaccctgcgg aatgccactc agcaaaagga catggtggag aaccgcggagc 1250
 caccctctgg ggtcaggtgc tgctgccaga tgtgctgtgg gcctttcttg 1300
 ctggagactc catctgagta cctggaaatt gtctgtgaga accacgggct 1350
 gctcccgccc ctctataagt ctgtcaaac ttacaccgtg tgagcactcc 1400
 cctcccccac cccatctcag tgttaactga ctgctgactt ggagtttcca 1450
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 ttggcctgga tcatccatcc atctgtacag ttcagccact gccacaagcc 1550
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 agctactcgg gaggtgagg caggagaatg gtgcgaaccc gggaggcgga 2500
 gcttgcatg agcccagatg gcgccactgc actccagcct gagtgcacaga 2550

gcgagactct gtctcca 2567

<210> 180

<211> 423

<212> PRT

<213> Homo Sapien

<400> 180

Met	Ala	Gln	Ala	Val	Trp	Ser	Arg	Leu	Gly	Arg	Ile	Leu	Trp	Leu	
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Ala	Cys	Leu	Leu	Pro	Trp	Ala	Pro	Ala	Gly	Val	Ala	Ala	Gly	Leu	
				20					25					30	
Tyr	Glu	Leu	Asn	Leu	Thr	Thr	Asp	Ser	Pro	Ala	Thr	Thr	Gly	Ala	
				35					40					45	
Val	Val	Thr	Ile	Ser	Ala	Ser	Leu	Val	Ala	Lys	Asp	Asn	Gly	Ser	
				50					55					60	
Leu	Ala	Leu	Pro	Ala	Asp	Ala	His	Leu	Tyr	Arg	Phe	His	Trp	Ile	
				65					70					75	
His	Thr	Pro	Leu	Val	Leu	Thr	Gly	Lys	Met	Glu	Lys	Gly	Leu	Ser	
				80					85					90	
Ser	Thr	Ile	Arg	Val	Val	Gly	His	Val	Pro	Gly	Glu	Phe	Pro	Val	
				95					100					105	
Ser	Val	Trp	Val	Thr	Ala	Ala	Asp	Cys	Trp	Met	Cys	Gln	Pro	Val	
				110					115					120	
Ala	Arg	Gly	Phe	Val	Val	Leu	Pro	Ile	Thr	Glu	Phe	Leu	Val	Gly	
				125					130					135	
Asp	Leu	Val	Val	Thr	Gln	Asn	Thr	Ser	Leu	Pro	Trp	Pro	Ser	Ser	
				140					145					150	
Tyr	Leu	Thr	Lys	Thr	Val	Leu	Lys	Val	Ser	Phe	Leu	Leu	His	Asp	
				155					160					165	
Pro	Ser	Asn	Phe	Leu	Lys	Thr	Ala	Leu	Phe	Leu	Tyr	Ser	Trp	Asp	
				170					175					180	
Phe	Gly	Asp	Gly	Thr	Gln	Met	Val	Thr	Glu	Asp	Ser	Val	Val	Tyr	
				185					190					195	
Tyr	Asn	Tyr	Ser	Ile	Ile	Gly	Thr	Phe	Thr	Val	Lys	Leu	Lys	Val	
				200					205					210	
Val	Ala	Glu	Trp	Glu	Glu	Val	Glu	Pro	Asp	Ala	Thr	Arg	Ala	Val	
				215					220					225	
Lys	Gln	Lys	Thr	Gly	Asp	Phe	Ser	Ala	Ser	Leu	Lys	Leu	Gln	Glu	
				230					235					240	
Thr	Leu	Arg	Gly	Ile	Gln	Val	Leu	Gly	Pro	Thr	Leu	Ile	Gln	Thr	
				245					250					255	

Phe Gln Lys Met Thr Val Thr Leu Asn Phe Leu Gly Ser Pro Pro
260 265 270

Leu Thr Val Cys Trp Arg Leu Lys Pro Glu Cys Leu Pro Leu Glu
275 280 285

Glu Gly Glu Cys His Pro Val Ser Val Ala Ser Thr Ala Tyr Asn
290 295 300

Leu Thr His Thr Phe Arg Asp Pro Gly Asp Tyr Cys Phe Ser Ile
305 310 315

Arg Ala Glu Asn Ile Ile Ser Lys Thr His Gln Tyr His Lys Ile
320 325 330

Gln Val Trp Pro Ser Arg Ile Gln Pro Ala Val Phe Ala Phe Pro
335 340 345

Cys Ala Thr Leu Ile Thr Val Met Leu Ala Phe Ile Met Tyr Met
350 355 360

Thr Leu Arg Asn Ala Thr Gln Gln Lys Asp Met Val Glu Asn Pro
365 370 375

Glu Pro Pro Ser Gly Val Arg Cys Cys Cys Gln Met Cys Cys Gly
380 385 390

Pro Phe Leu Leu Glu Thr Pro Ser Glu Tyr Leu Glu Ile Val Arg
395 400 405

Glu Asn His Gly Leu Leu Pro Pro Leu Tyr Lys Ser Val Lys Thr
410 415 420

Tyr Thr Val

<210> 181
<211> 1533
<212> DNA
<213> Homo Sapien

<400> 181
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ccagcggcgtg cgcagaggcg gggaccccg cctcatgcac gggaagactg 200
tgctgatcac cggggcgaac agcggcctgg gccgcgccac ggccgccgag 250
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cgccgaggag gcggcgggtc agctccgccg cgagctccgc caggccgcgg 350
agtgcggccc agagcctggc gtcagcgggg tgggcgagct catagtccgg 400

gagctggacc tcgcctcgct gcgctcggcg cgcgcccttct gccaggaaat 450
gctccaggaa gaggctagggc tggatgtctt gatcaataac gcagggatct 500
tccagtcccc ttacatgaag actgaagatg ggtttgagat gcagttcgga 550
gtgaaccatc tggggcactt tctactcacc aatcttctcc ttggactcct 600
caaaagttca gctcccagca ggattgtggt agtttcttcc aaactttata 650
aatacggaga catcaatttt gatgacttga acagtgaaca aagctataat 700
aaaagctttt gttatagccg gagcaaactg gctaacattc tttttaccag 750
ggaaactagcc cgccgcttag aaggcacaaa tgtcaccgtc aatgtgttgc 800
atcctgggtat tgtacggaca aatctgggga ggcacataca cattccactg 850
ttggtcaaac cactcttcaa tttggtgtca tgggcttttt tcaaaactcc 900
agtagaaggt gccagactt ccatttatctt ggccctcttca cctgaggtag 950
aaggagtgtc aggaagatac tttggggatt gtaaagagga agaactgttg 1000
cccaaagcta tggatgaatc tgttgcaaga aaactctggg atatcagtga 1050
agtgatgggt ggctgctaa aataggaaca aggagtaaaa gagctgttta 1100
taaaactgca tatcagttat atctgtgatc aggaatgggtg tggattgaga 1150
acttggtact tgaagaaaaa gaattttgat attggaatag cctgctaaga 1200
ggtacatgtg ggtattttgg agttactgaa aaattatctt tgggataaga 1250
gaatttcagc aaagatgttt taaatatata tagtaagtat aatgaataat 1300
aagtacaatg aaaaatacaa ttatattgta aaattataac tgggcaagca 1350
tggatgacat attaataatt gtcagaatta agtgactcaa agtgctatcg 1400
agagggtttt caagtatctt tgagtttcat ggccaaagtg ttaactagtt 1450
ttactacaat gtttgggtgt tgtgtggaaa ttatctgcct ggtgtgtgca 1500
cacaagtctt acttggaata aatttactgg tac 1533

<210> 182
<211> 336
<212> PRT
<213> Homo Sapien

<400> 182
Met Ala Val Ala Thr Ala Ala Ala Val Leu Ala Ala Leu Gly Gly
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Ala Leu Trp Leu Ala Ala Arg Arg Phe Val Gly Pro Arg Val Gln
20 25 30

Arg	Leu	Arg	Arg	Gly	Gly	Asp	Pro	Gly	Leu	Met	His	Gly	Lys	Thr	
				35					40					45	
Val	Leu	Ile	Thr	Gly	Ala	Asn	Ser	Gly	Leu	Gly	Arg	Ala	Thr	Ala	
				50					55					60	
Ala	Glu	Leu	Leu	Arg	Leu	Gly	Ala	Arg	Val	Ile	Met	Gly	Cys	Arg	
				65					70					75	
Asp	Arg	Ala	Arg	Ala	Glu	Glu	Ala	Ala	Gly	Gln	Leu	Arg	Arg	Glu	
				80					85					90	
Leu	Arg	Gln	Ala	Ala	Glu	Cys	Gly	Pro	Glu	Pro	Gly	Val	Ser	Gly	
				95					100					105	
Val	Gly	Glu	Leu	Ile	Val	Arg	Glu	Leu	Asp	Leu	Ala	Ser	Leu	Arg	
				110					115					120	
Ser	Val	Arg	Ala	Phe	Cys	Gln	Glu	Met	Leu	Gln	Glu	Glu	Pro	Arg	
				125					130					135	
Leu	Asp	Val	Leu	Ile	Asn	Asn	Ala	Gly	Ile	Phe	Gln	Cys	Pro	Tyr	
				140					145					150	
Met	Lys	Thr	Glu	Asp	Gly	Phe	Glu	Met	Gln	Phe	Gly	Val	Asn	His	
				155					160					165	
Leu	Gly	His	Phe	Leu	Leu	Thr	Asn	Leu	Leu	Leu	Gly	Leu	Leu	Lys	
				170					175					180	
Ser	Ser	Ala	Pro	Ser	Arg	Ile	Val	Val	Val	Ser	Ser	Lys	Leu	Tyr	
				185					190					195	
Lys	Tyr	Gly	Asp	Ile	Asn	Phe	Asp	Asp	Leu	Asn	Ser	Glu	Gln	Ser	
				200					205					210	
Tyr	Asn	Lys	Ser	Phe	Cys	Tyr	Ser	Arg	Ser	Lys	Leu	Ala	Asn	Ile	
				215					220					225	
Leu	Phe	Thr	Arg	Glu	Leu	Ala	Arg	Arg	Leu	Glu	Gly	Thr	Asn	Val	
				230					235					240	
Thr	Val	Asn	Val	Leu	His	Pro	Gly	Ile	Val	Arg	Thr	Asn	Leu	Gly	
				245					250					255	
Arg	His	Ile	His	Ile	Pro	Leu	Leu	Val	Lys	Pro	Leu	Phe	Asn	Leu	
				260					265					270	
Val	Ser	Trp	Ala	Phe	Phe	Lys	Thr	Pro	Val	Glu	Gly	Ala	Gln	Thr	
				275					280					285	
Ser	Ile	Tyr	Leu	Ala	Ser	Ser	Pro	Glu	Val	Glu	Gly	Val	Ser	Gly	
				290					295					300	
Arg	Tyr	Phe	Gly	Asp	Cys	Lys	Glu	Glu	Glu	Leu	Leu	Pro	Lys	Ala	
				305					310					315	
Met	Asp	Glu	Ser	Val	Ala	Arg	Lys	Leu	Trp	Asp	Ile	Ser	Glu	Val	

320

325

330

Met Val Gly Leu Leu Lys
335

<210> 183

<211> 1594

<212> DNA

<213> Homo Sapien

<400> 183

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cccctaccgc cgtgcaaaaag gaggaggcgc ggcaagacgt ggaggccctc 150
ctgagccgca cggtcagaac tcagatactg accggcaagg agctccgagt 200
tgccaccag gaaaaagagg gctcctctgg gagatgtatg cttactctct 250
taggcctttc attcatcttg gcaggactta ttgttggtgg agcctgcatt 300
tacaagtact tcatgcccac gagcaccatt taccgtggag agatgtgctt 350
ttttgattct gaggatcctg caaattccct tcgtggagga gagcctaact 400
tcctgcctgt gactgaggag gctgacattc gtgaggatga caacattgca 450
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aatctggtag agctctttgg caaactggcg agtggcagat atctgcctca 650
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ccaagatctg tcaagagtaa gaggcaacag atagagtgtc cttggtaata 900
agaagtcaga gatttacaat atgactttta cattaagggt tatgggatac 950
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gaaaaaaaaa aaaactacta accactgcaa gctcttgtca aattttagtt 1050
taattggcat tgcttgtttt ttgaaactga aattacatga gtttcatttt 1100
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cctaacaatcc tgacaataaa ttccatccgt tggttttttt gtttgtttgt 1200

tttttctttt cctttaagta agctctttat tcatcttatg gtggagcaat 1250
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 ttcttgaatt tagaaattac atctttgcag ttctgttagg tgctctgtaa 1400
 ttaacctgac ttatatgtga acaattttca tgagacagtc atttttaact 1450
 aatgcagtga ttctttctca ctactatctg tattgtggaa tgcacaaaat 1500
 tgtgtaggtg ctgaatgctg taaggagttt aggttgtatg aattctacaa 1550
 ccctataata aattttactc tatacaaaaa aaaaaaaaaa aaaa 1594

<210> 184
 <211> 263
 <212> PRT
 <213> Homo Sapien

<400> 184
 Met Val Lys Ile Ala Phe Asn Thr Pro Thr Ala Val Gln Lys Glu
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 Glu Ala Arg Gln Asp Val Glu Ala Leu Leu Ser Arg Thr Val Arg
 20 25 30
 Thr Gln Ile Leu Thr Gly Lys Glu Leu Arg Val Ala Thr Gln Glu
 35 40 45
 Lys Glu Gly Ser Ser Gly Arg Cys Met Leu Thr Leu Leu Gly Leu
 50 55 60
 Ser Phe Ile Leu Ala Gly Leu Ile Val Gly Gly Ala Cys Ile Tyr
 65 70 75
 Lys Tyr Phe Met Pro Lys Ser Thr Ile Tyr Arg Gly Glu Met Cys
 80 85 90
 Phe Phe Asp Ser Glu Asp Pro Ala Asn Ser Leu Arg Gly Gly Glu
 95 100 105
 Pro Asn Phe Leu Pro Val Thr Glu Glu Ala Asp Ile Arg Glu Asp
 110 115 120
 Asp Asn Ile Ala Ile Ile Asp Val Pro Val Pro Ser Phe Ser Asp
 125 130 135
 Ser Asp Pro Ala Ala Ile Ile His Asp Phe Glu Lys Gly Met Thr
 140 145 150
 Ala Tyr Leu Asp Leu Leu Leu Gly Asn Cys Tyr Leu Met Pro Leu
 155 160 165
 Asn Thr Ser Ile Val Met Pro Pro Lys Asn Leu Val Glu Leu Phe
 170 175 180

Gly Lys Leu Ala Ser Gly Arg Tyr Leu Pro Gln Thr Tyr Val Val
185 190 195

Arg Glu Asp Leu Val Ala Val Glu Glu Ile Arg Asp Val Ser Asn
200 205 210

Leu Gly Ile Phe Ile Tyr Gln Leu Cys Asn Asn Arg Lys Ser Phe
215 220 225

Arg Leu Arg Arg Arg Asp Leu Leu Leu Gly Phe Asn Lys Arg Ala
230 235 240

Ile Asp Lys Cys Trp Lys Ile Arg His Phe Pro Asn Glu Phe Ile
245 250 255

Val Glu Thr Lys Ile Cys Gln Glu
260

<210> 185
<211> 485
<212> DNA
<213> Homo Sapien

<400> 185
gctcaagacc cagcagtggg acagccagac agacggcacg atggcactga 50
gctcccagat ctgggccgct tgcctcctgc tctcctcct cctcgccagc 100
ctgaccagtg gctctgtttt cccacaacag acgggacaac ttgcagagct 150
gcaacccag gacagagctg gagccagggc cagctggatg cccatgttcc 200
agaggcgaag gaggcgagac acccacttcc ccatctgcat tttctgctgc 250
ggctgctgtc atcgatcaaa gtgtgggatg tgctgcaaga cgtagaacct 300
acctgccttg ccccgctccc ctcccttctc tatttattcc tgctgcccc 350
gaacataggt cttggaataa aatggctggg tcttttgttt tccaaaaaaa 400
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 450
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 485

<210> 186
<211> 84
<212> PRT
<213> Homo Sapien

<400> 186
Met Ala Leu Ser Ser Gln Ile Trp Ala Ala Cys Leu Leu Leu Leu
1 5 10 15

Leu Leu Leu Ala Ser Leu Thr Ser Gly Ser Val Phe Pro Gln Gln
20 25 30

Thr Gly Gln Leu Ala Glu Leu Gln Pro Gln Asp Arg Ala Gly Ala
35 40 45

Arg Ala Ser Trp Met Pro Met Phe Gln Arg Arg Arg Arg Arg Asp
50 55 60

Thr His Phe Pro Ile Cys Ile Phe Cys Cys Gly Cys Cys His Arg
65 70 75

Ser Lys Cys Gly Met Cys Cys Lys Thr
80

<210> 187

<211> 2359

<212> DNA

<213> Homo Sapien

<400> 187

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agcctgattg tcaaccttct gggcatctcc ctgactgtcc tcttcacct 150
ccttctcggtt ttcacatag tgccagccat ttttgagtc tcttttggt 200
tccgcaaact ctacatgaaa agtctgttaa aaatctttgc gtgggctacc 250
ttgagaatgg agcgaggagc caaggagaag aaccaccagc tttacaagcc 300
ctacaccaac ggaatcattg caaaggatcc cacttcacta gaagaagaga 350
tcaaagagat tcgtcgaagt ggtagtagta aggctctgga caaactcca 400
gagttcgagc tctctgacat tttctacttt tgccggaaaag gaatggagac 450
cattatggat gatgaggtga caaagagatt ctcagcagaa gaactggagt 500
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cggctcacgg tcctgtgggg gttaggagtg ctgattcggc actgctttct 600
gctgccgctc aggatagcac tggctttcac agggattagc cttctggtg 650
tgggcacaac tgtggtggga tacttgccaa atgggagggt taaggaattc 700
atgagtaaac atgttcactt aatgtgttac cggatctgcg tgcgagcgct 750
gacagccatc atcacctacc atgacagga aaacagacca agaaatggtg 800
gcatctgtgt ggccaatcat acctcaccga tcgatgtgat catcttgcc 850
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tgtgattcag agagccatgg tgaaggcctg cccacacgtc tggtttgagc 950
gctcggaagt gaaggatgc cacctggtgg ctaagagact gactgaacat 1000
gtgcaagata aaagcaagct gcctatcctc atcttcccag aaggaacctg 1050
catcaataat acatcggtga tgatgttcaa aaagggaagt tttgaaattg 1100

gagccacagt ttaccctgtt gctatcaagt atgaccctca atttggcgat 1150
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gatgaccagc tgggccattg tctgcagcgt gtggtacctg cctcccatga 1250
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gccattgccca ggcagggagg acttgtggac ctgctgtggg atgggggcct 1350
gaagagggag aaggtgaagg acacgttcaa ggaggagcag cagaagctgt 1400
acagcaagat gatcgtgggg aaccacaagg acaggagccg ctctgagcc 1450
tgctccagc tggctggggc caccgtgcgg ggtgccaacg ggctcagagc 1500
tggagttgcc gccgcgcgcc ccactgctgt gtcctttcca gactccaggg 1550
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cgggatccct gtgcaccccg cgcagcctac ccttggtggt ctaaaccgat 1650
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gcgggctgag tggttgggga gatgtggcca tggctctgtg ctagagatgg 1800
cggtaacaaga gtctgttatg caagcccgtg tgccagggat gtgctggggg 1850
cggccacccg ctctccagga aaggcacagc tgaggcactg tggctggctt 1900
cggcctcaac atcgccccca gccttgagc tctgcagaca tgataggaag 1950
gaaactgtca tctgcagggg ctttcagcaa aatgaagggt tagattttta 2000
tgctgctgct gatgggggta ctaaaggag ggggaaggag cagggtgggccc 2050
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gttgtgggga ttaaagtgct gcgggtgagt gaaggacaca tcacgttcag 2250
tgtttcaagt acaggcccac aaaacggggc acggcaggcc tgagctcaga 2300
gctgctgcac tgggctttgg atttgttctt gtgagtaaat aaaactggct 2350
ggtgaatga 2359

<210> 188
<211> 456
<212> PRT
<213> Homo Sapien
<400> 188

Met	Phe	Leu	Leu	Leu	Pro	Phe	Asp	Ser	Leu	Ile	Val	Asn	Leu	Leu	
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Gly	Ile	Ser	Leu	Thr	Val	Leu	Phe	Thr	Leu	Leu	Leu	Val	Phe	Ile	
				20					25					30	
Ile	Val	Pro	Ala	Ile	Phe	Gly	Val	Ser	Phe	Gly	Ile	Arg	Lys	Leu	
				35					40					45	
Tyr	Met	Lys	Ser	Leu	Leu	Lys	Ile	Phe	Ala	Trp	Ala	Thr	Leu	Arg	
				50					55					60	
Met	Glu	Arg	Gly	Ala	Lys	Glu	Lys	Asn	His	Gln	Leu	Tyr	Lys	Pro	
				65					70					75	
Tyr	Thr	Asn	Gly	Ile	Ile	Ala	Lys	Asp	Pro	Thr	Ser	Leu	Glu	Glu	
				80					85					90	
Glu	Ile	Lys	Glu	Ile	Arg	Arg	Ser	Gly	Ser	Ser	Lys	Ala	Leu	Asp	
				95					100					105	
Asn	Thr	Pro	Glu	Phe	Glu	Leu	Ser	Asp	Ile	Phe	Tyr	Phe	Cys	Arg	
				110					115					120	
Lys	Gly	Met	Glu	Thr	Ile	Met	Asp	Asp	Glu	Val	Thr	Lys	Arg	Phe	
				125					130					135	
Ser	Ala	Glu	Glu	Leu	Glu	Ser	Trp	Asn	Leu	Leu	Ser	Arg	Thr	Asn	
				140					145					150	
Tyr	Asn	Phe	Gln	Tyr	Ile	Ser	Leu	Arg	Leu	Thr	Val	Leu	Trp	Gly	
				155					160					165	
Leu	Gly	Val	Leu	Ile	Arg	Tyr	Cys	Phe	Leu	Leu	Pro	Leu	Arg	Ile	
				170					175					180	
Ala	Leu	Ala	Phe	Thr	Gly	Ile	Ser	Leu	Leu	Val	Val	Gly	Thr	Thr	
				185					190					195	
Val	Val	Gly	Tyr	Leu	Pro	Asn	Gly	Arg	Phe	Lys	Glu	Phe	Met	Ser	
				200					205					210	
Lys	His	Val	His	Leu	Met	Cys	Tyr	Arg	Ile	Cys	Val	Arg	Ala	Leu	
				215					220					225	
Thr	Ala	Ile	Ile	Thr	Tyr	His	Asp	Arg	Glu	Asn	Arg	Pro	Arg	Asn	
				230					235					240	
Gly	Gly	Ile	Cys	Val	Ala	Asn	His	Thr	Ser	Pro	Ile	Asp	Val	Ile	
				245					250					255	
Ile	Leu	Ala	Ser	Asp	Gly	Tyr	Tyr	Ala	Met	Val	Gly	Gln	Val	His	
				260					265					270	
Gly	Gly	Leu	Met	Gly	Val	Ile	Gln	Arg	Ala	Met	Val	Lys	Ala	Cys	
				275					280					285	
Pro	His	Val	Trp	Phe	Glu	Arg	Ser	Glu	Val	Lys	Asp	Arg	His	Leu	

Val Ala Lys Arg	Leu Thr Glu His	Val Gln Asp Lys Ser Lys	Leu
305		310	315
Pro Ile Leu Ile	Phe Pro Glu Gly Thr	Cys Ile Asn Asn Thr	Ser
320		325	330
Val Met Met Phe	Lys Lys Gly Ser Phe	Glu Ile Gly Ala Thr	Val
335		340	345
Tyr Pro Val Ala	Ile Lys Tyr Asp Pro	Gln Phe Gly Asp Ala	Phe
350		355	360
Trp Asn Ser Ser	Lys Tyr Gly Met Val	Thr Tyr Leu Leu Arg	Met
365		370	375
Met Thr Ser Trp	Ala Ile Val Cys Ser	Val Trp Tyr Leu Pro	Pro
380		385	390
Met Thr Arg Glu	Ala Asp Glu Asp Ala	Val Gln Phe Ala Asn	Arg
395		400	405
Val Lys Ser Ala	Ile Ala Arg Gln Gly	Gly Leu Val Asp Leu	Leu
410		415	420
Trp Asp Gly Gly	Leu Lys Arg Glu Lys	Val Lys Asp Thr Phe	Lys
425		430	435
Glu Glu Gln Gln	Lys Leu Tyr Ser Lys	Met Ile Val Gly Asn	His
440		445	450
Lys Asp Arg Ser	Arg Ser		
455			

<210> 189
 <211> 1103
 <212> DNA
 <213> Homo Sapien

<400> 189
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 ccctggccct cacgtctcct ccagggatgg cgctggcggc tttgatgatc 100
 gccctcggca gcctcggcct ccacacctgg caggcccagg ctgttccac 150
 catcctgccc ctgggcctgg ctccagacac ctttgacgat acctatgtgg 200
 gttgtgcaga ggagatggag gagaaggcag cccccctgct aaaggaggaa 250
 atggcccacc atgccttgct gcgggaatcc tgggaggcag ccaggagac 300
 ctgggaggac aagcgtcgag ggcttacctt gccccctggc ttcaaagccc 350
 agaatggaat agccattatg gtctacacca actcatcgaa caccttgtac 400
 tgggagttga atcaggccgt gcggacgggc ggaggctccc gggagctcta 450

catgaggcac tttcccttca aggccctgca tttctacctg atccggggccc 500
 tgcagctgct gcgaggcagt gggggctgca gcaggggacc tggggaggtg 550
 gtgttccgag gtgtgggcag ccttcgcttt gaaccaaga ggctggggga 600
 ctctgtccgc ttggggcagt ttgcctccag ctccctggat aaggcagtgg 650
 cccacagatt tggggagaag agggggggct gtgtgtctgc gccaggggtg 700
 cagctagggg cacaatctga gggggcctcc tctctgcccc cctggaagac 750
 tctgtctcttg gcccttgag agttccagct ctcaggggtt gggccctgaa 800
 agtccaacat ctgccactta ggagccctgg gaacgggtga ccttcatatg 850
 acgaagaggc acctccagca gccttgagaa gcaagaacat ggttccggac 900
 ccagccctag cagccttctc cccaaccagg atgttggcct ggggaggcca 950
 cagcagggtc gagggaaactc tgctatgtga tggggacttc ctgggacaag 1000
 caaggaaagt actgaggcag ccaattgatt gaacgggtgtt gcaatgtgga 1050
 gacatggagt tttattgagg tagctacgtg attaaatggt attgcagtgt 1100
 gga 1103

<210> 190
 <211> 240
 <212> PRT
 <213> Homo Sapien

<400> 190
 Met Ala Leu Ala Ala Leu Met Ile Ala Leu Gly Ser Leu Gly Leu
 1 5 10 15
 His Thr Trp Gln Ala Gln Ala Val Pro Thr Ile Leu Pro Leu Gly
 20 25 30
 Leu Ala Pro Asp Thr Phe Asp Asp Thr Tyr Val Gly Cys Ala Glu
 35 40 45
 Glu Met Glu Glu Lys Ala Ala Pro Leu Leu Lys Glu Glu Met Ala
 50 55 60
 His His Ala Leu Leu Arg Glu Ser Trp Glu Ala Ala Gln Glu Thr
 65 70 75
 Trp Glu Asp Lys Arg Arg Gly Leu Thr Leu Pro Pro Gly Phe Lys
 80 85 90
 Ala Gln Asn Gly Ile Ala Ile Met Val Tyr Thr Asn Ser Ser Asn
 95 100 105
 Thr Leu Tyr Trp Glu Leu Asn Gln Ala Val Arg Thr Gly Gly Gly
 110 115 120

Ser	Arg	Glu	Leu	Tyr	Met	Arg	His	Phe	Pro	Phe	Lys	Ala	Leu	His
				125					130					135
Phe	Tyr	Leu	Ile	Arg	Ala	Leu	Gln	Leu	Leu	Arg	Gly	Ser	Gly	Gly
				140					145					150
Cys	Ser	Arg	Gly	Pro	Gly	Glu	Val	Val	Phe	Arg	Gly	Val	Gly	Ser
				155					160					165
Leu	Arg	Phe	Glu	Pro	Lys	Arg	Leu	Gly	Asp	Ser	Val	Arg	Leu	Gly
				170					175					180
Gln	Phe	Ala	Ser	Ser	Ser	Leu	Asp	Lys	Ala	Val	Ala	His	Arg	Phe
				185					190					195
Gly	Glu	Lys	Arg	Arg	Gly	Cys	Val	Ser	Ala	Pro	Gly	Val	Gln	Leu
				200					205					210
Gly	Ser	Gln	Ser	Glu	Gly	Ala	Ser	Ser	Leu	Pro	Pro	Trp	Lys	Thr
				215					220					225
Leu	Leu	Leu	Ala	Pro	Gly	Glu	Phe	Gln	Leu	Ser	Gly	Val	Gly	Pro
				230					235					240

<210> 191
 <211> 1076
 <212> DNA
 <213> Homo Sapien

<400> 191
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 caacatgcct caccctcatc tatatccttt ggcagctcac agggtcagca 100
 gcctctggac ccgtgaaaga gctggctcgg tccgttggtg gggccgtgac 150
 tttccccctg aagtccaaag taaagcaagt tgactctatt gtctggacct 200
 tcaacacaac cctcttctgt accatacagc cagaaggggg cactatcata 250
 gtgacccaaa atcgtaatag ggagagagta gacttcccag atggaggcta 300
 ctccctgaag ctcagcaaac tgaagaagaa tgactcaggg atctactatg 350
 tggggatata cagctcatca ctccagcagc cctccaccca ggagtacgtg 400
 ctgcatgtct acgagcacct gtcaaagcct aaagtcacca tgggtctgca 450
 gagcaataag aatggcacct gtgtgaccaa tctgacatgc tgcattggaac 500
 atggggaaga ggatgtgatt tacccttggg aggccttggg gcaagcagcc 550
 aatgagtcct ataattgggtc catcctcccc atctcctgga gatggggaga 600
 aagtgatatg accttcatct gcgttgccag gaaccctgtc agcagaaaact 650
 tctcaagccc catccttgcc aggaagctct gtgaaggtgc tgctgatgac 700

ccagattcct ccatggctct cctgtgtctc ctgttggtgc ccctcctgct 750
cagtctcttt gtactggggc tatttctttg gtttctgaag agagagagac 800
aagaagagta cattgaagag aagaagagag tggacatttg tcgggaaact 850
cctaacatat gccccattc tggagagaac acagagtacg acacaatccc 900
tcacactaat agaacaatcc taaaggaaga tccagcaaat acggtttact 950
ccactgtgga aataccgaaa aagatggaaa atccccactc actgctcacg 1000
atgccagaca caccaagggt atttgccat gagaatgtta tctagacagc 1050
agtgcactcc cctaagtctc tgcctca 1076

<210> 192

<211> 335

<212> PRT

<213> Homo Sapien

<400> 192

Met	Ala	Gly	Ser	Pro	Thr	Cys	Leu	Thr	Leu	Ile	Tyr	Ile	Leu	Trp	1	5	10	15
Gln	Leu	Thr	Gly	Ser	Ala	Ala	Ser	Gly	Pro	Val	Lys	Glu	Leu	Val	20	25	30	
Gly	Ser	Val	Gly	Gly	Ala	Val	Thr	Phe	Pro	Leu	Lys	Ser	Lys	Val	35	40	45	
Lys	Gln	Val	Asp	Ser	Ile	Val	Trp	Thr	Phe	Asn	Thr	Thr	Pro	Leu	50	55	60	
Val	Thr	Ile	Gln	Pro	Glu	Gly	Gly	Thr	Ile	Ile	Val	Thr	Gln	Asn	65	70	75	
Arg	Asn	Arg	Glu	Arg	Val	Asp	Phe	Pro	Asp	Gly	Gly	Tyr	Ser	Leu	80	85	90	
Lys	Leu	Ser	Lys	Leu	Lys	Lys	Asn	Asp	Ser	Gly	Ile	Tyr	Tyr	Val	95	100	105	
Gly	Ile	Tyr	Ser	Ser	Ser	Leu	Gln	Gln	Pro	Ser	Thr	Gln	Glu	Tyr	110	115	120	
Val	Leu	His	Val	Tyr	Glu	His	Leu	Ser	Lys	Pro	Lys	Val	Thr	Met	125	130	135	
Gly	Leu	Gln	Ser	Asn	Lys	Asn	Gly	Thr	Cys	Val	Thr	Asn	Leu	Thr	140	145	150	
Cys	Cys	Met	Glu	His	Gly	Glu	Glu	Asp	Val	Ile	Tyr	Thr	Trp	Lys	155	160	165	
Ala	Leu	Gly	Gln	Ala	Ala	Asn	Glu	Ser	His	Asn	Gly	Ser	Ile	Leu	170	175	180	

Pro Ile Ser Trp Arg Trp Gly Glu Ser Asp Met Thr Phe Ile Cys
185 190 195

Val Ala Arg Asn Pro Val Ser Arg Asn Phe Ser Ser Pro Ile Leu
200 205 210

Ala Arg Lys Leu Cys Glu Gly Ala Ala Asp Asp Pro Asp Ser Ser
215 220 225

Met Val Leu Leu Cys Leu Leu Leu Val Pro Leu Leu Leu Ser Leu
230 235 240

Phe Val Leu Gly Leu Phe Leu Trp Phe Leu Lys Arg Glu Arg Gln
245 250 255

Glu Glu Tyr Ile Glu Glu Lys Lys Arg Val Asp Ile Cys Arg Glu
260 265 270

Thr Pro Asn Ile Cys Pro His Ser Gly Glu Asn Thr Glu Tyr Asp
275 280 285

Thr Ile Pro His Thr Asn Arg Thr Ile Leu Lys Glu Asp Pro Ala
290 295 300

Asn Thr Val Tyr Ser Thr Val Glu Ile Pro Lys Lys Met Glu Asn
305 310 315

Pro His Ser Leu Leu Thr Met Pro Asp Thr Pro Arg Leu Phe Ala
320 325 330

Tyr Glu Asn Val Ile
335

<210> 193
<211> 1969
<212> DNA
<213> Homo Sapien

<400> 193
ggaggaggga gggcgggcag gcgccagccc agagcagccc cgggcaccag 50
cacggactct ctcttcacgc ccaggtgccc cccactctcg ctccattcgg 100
cgggagcacc cagtcctgta cgccaaggaa ctggtcctgg gggcaccatg 150
gtttcggcgg cagccccag cctcctcatc cttctgttgc tgctgctggg 200
gtctgtgcct gctaccgacg cccgctctgt gccctgaag gccacgttcc 250
tgaggatgt ggcgggtagt ggggaggcgg agggctcgtc ggcctcctcc 300
ccgagcctcc cgccaccctg gaccccgccc ctcagcccca catcgatggg 350
gccccagccc acaaccctgg ggggcccac accccacc aacttcctgg 400
atgggatagt ggacttcttc cgccagtacg tgatgctgat tgctgtggtg 450
ggctccctgg cctttctgct gatgttcac gtctgtgccg cggtcatcac 500

ccggcagaag cagaaggcct cggcctatta cccatcgtcc ttccccaaga 550
agaagtacgt ggaccagagt gaccgggccc ggggcccccg ggccttcagt 600
gaggtccccg acagagcccc cgacagcagg cccgaggaag ccctggattc 650
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ccccaccag ggctgcaactg ggcgggtggg acggagccag gatggtggag 750
ggcaggggcg cagaggaaga ggagaagggc agccaggagg gggaccagga 800
agtccaggga catgggggcc cagtggagac accagaggcg caggaggagc 850
cgtgctcagg ggtccttgag ggggctgtgg tggccggtga gggccaaggg 900
gagctggaag ggtctctctt gttagcccag gaagcccagg gaccagtggg 950
tccccccgaa agcccctgtg cttgcagcag tgtccacccc agtgtctaac 1000
agtccctccc ggctgccagc cctgactgtc gggcccccaa gtggtcacct 1050
ccccgtgtat gaaaaggcct tcagccctga ctgcttctg aactccctc 1100
cttggcctcc ctgtggtgcc aatcccagca tgtgtgatt ctacagcagg 1150
cagaaatgct ggtccccggt gcccggagg aatcttacca agtgccatca 1200
tccttcacct cagcagcccc aaagggtac atcctacagc acagctcccc 1250
tgacaaagtg agggagggca cgtgtccctg tgacagccag gataaaacat 1300
cccccaaagt gctgggatta caggcgtgag ccaccgtgcc cgccccaaac 1350
tactttttaa aacagctaca gggtaaaatc ctgcagcacc cactctggaa 1400
aatactgtc ttaattttcc tgaagggtgc cccctgtttc tagttgggtc 1450
aggattaggg atgtggggta tagggcattt aaatcctctc aagcgtctc 1500
caagcacccc cggcctgggg gtgagtttct catcccgcta ctgctgctgg 1550
gatcaggttg aatgaatgga actcttctg tctggcctcc aaagcagcct 1600
agaagctgag gggctgtgtt tgaggggacc tccaccctgg ggaagtccga 1650
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ccaccccctg ttgctcacac attgtctggc agcctgtgtc cacaatattc 1750
gtcagtcctc gacagggagc ctgggctccg tcctgcttta gggaggctct 1800
ggcaggaggt cctctcccc atccctccat ctggggctcc cccaacctct 1850
gcacagctct ccagggtctg agatataatg caccagcaca ataaaccttt 1900
attccggcct gaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa 1950

aaaaaaaaa aaaaaaaga 1969

<210> 194

<211> 283

<212> PRT

<213> Homo Sapien

<400> 194

Met	Val	Ser	Ala	Ala	Ala	Pro	Ser	Leu	Leu	Ile	Leu	Leu	Leu	Leu	
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Leu	Leu	Gly	Ser	Val	Pro	Ala	Thr	Asp	Ala	Arg	Ser	Val	Pro	Leu	
				20					25					30	
Lys	Ala	Thr	Phe	Leu	Glu	Asp	Val	Ala	Gly	Ser	Gly	Glu	Ala	Glu	
				35					40					45	
Gly	Ser	Ser	Ala	Ser	Ser	Pro	Ser	Leu	Pro	Pro	Pro	Trp	Thr	Pro	
				50					55					60	
Ala	Leu	Ser	Pro	Thr	Ser	Met	Gly	Pro	Gln	Pro	Thr	Thr	Leu	Gly	
				65					70					75	
Gly	Pro	Ser	Pro	Pro	Thr	Asn	Phe	Leu	Asp	Gly	Ile	Val	Asp	Phe	
				80					85					90	
Phe	Arg	Gln	Tyr	Val	Met	Leu	Ile	Ala	Val	Val	Gly	Ser	Leu	Ala	
				95					100					105	
Phe	Leu	Leu	Met	Phe	Ile	Val	Cys	Ala	Ala	Val	Ile	Thr	Arg	Gln	
				110					115					120	
Lys	Gln	Lys	Ala	Ser	Ala	Tyr	Tyr	Pro	Ser	Ser	Phe	Pro	Lys	Lys	
				125					130					135	
Lys	Tyr	Val	Asp	Gln	Ser	Asp	Arg	Ala	Gly	Gly	Pro	Arg	Ala	Phe	
				140					145					150	
Ser	Glu	Val	Pro	Asp	Arg	Ala	Pro	Asp	Ser	Arg	Pro	Glu	Glu	Ala	
				155					160					165	
Leu	Asp	Ser	Ser	Arg	Gln	Leu	Gln	Ala	Asp	Ile	Leu	Ala	Ala	Thr	
				170					175					180	
Gln	Asn	Leu	Lys	Ser	Pro	Thr	Arg	Ala	Ala	Leu	Gly	Gly	Gly	Asp	
				185					190					195	
Gly	Ala	Arg	Met	Val	Glu	Gly	Arg	Gly	Ala	Glu	Glu	Glu	Glu	Lys	
				200					205					210	
Gly	Ser	Gln	Glu	Gly	Asp	Gln	Glu	Val	Gln	Gly	His	Gly	Val	Pro	
				215					220					225	
Val	Glu	Thr	Pro	Glu	Ala	Gln	Glu	Glu	Pro	Cys	Ser	Gly	Val	Leu	
				230					235					240	
Glu	Gly	Ala	Val	Val	Ala	Gly	Glu	Gly	Gln	Gly	Glu	Leu	Glu	Gly	
				245					250					255	

Ser Leu Leu Leu Ala Gln Glu Ala Gln Gly Pro Val Gly Pro Pro
260 265 270

Glu Ser Pro Cys Ala Cys Ser Ser Val His Pro Ser Val
275 280

<210> 195
<211> 860
<212> DNA
<213> Homo Sapien

<400> 195
gaaagacgtg gtcctgacag acagacaatc ctattcccta ccaaaatgaa 50
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aagaagctag ttctacggga aggaacttta atgtagaaaa gattaatggg 150
gaatggcata ctattatcct ggcctctgac aaaagagaaa agatagaaga 200
acatggcaac tttagacttt ttctggagca aatccatgtc ttggagaatt 250
ccttagttct taaagtccat actgtaagag atgaagagtg ctccgaatta 300
tctatggttg ctgacaaaac agaaaaggct ggtgaatatt ctgtgacgta 350
tgatggattc aatacattta ctatacctaa gacagactat gataactttc 400
ttatggctca cctcattaac gaaaaggatg gggaaacctt ccagctgatg 450
gggctctatg gccgagaacc agatttgagt tcagacatca aggaaagggt 500
tgcacaacta tgtgaggagc atggaatcct tagagaaaat atcattgacc 550
tatccaatgc caatcgctgc ctccaggccc gagaatgaag aatggcctga 600
gcctccagtg ttgagtggac acttctcacc aggactccac catcatccct 650
tcctatccat acagcatccc cagtataaat tctgtgatct gcattccatc 700
ctgtctcaact gagaagtcca attccagtct atcaacatgt tacctaggat 750
acctcatcaa gaatcaaaga cttcttttaa tttctctttg atacaccctt 800
gacaattttt catgaaatta ttctcttccc tgttcaataa atgattaccc 850
ttgcacttaa 860

<210> 196
<211> 180
<212> PRT
<213> Homo Sapien

<400> 196
Met Lys Met Leu Leu Leu Cys Leu Gly Leu Thr Leu Val Cys
1 5 10 15
Val His Ala Glu Glu Ala Ser Ser Thr Gly Arg Asn Phe Asn Val

	20	25	30
Glu Lys Ile Asn Gly Glu Trp His Thr Ile Ile Leu Ala Ser Asp	35	40	45
Lys Arg Glu Lys Ile Glu Glu His Gly Asn Phe Arg Leu Phe Leu	50	55	60
Glu Gln Ile His Val Leu Glu Asn Ser Leu Val Leu Lys Val His	65	70	75
Thr Val Arg Asp Glu Glu Cys Ser Glu Leu Ser Met Val Ala Asp	80	85	90
Lys Thr Glu Lys Ala Gly Glu Tyr Ser Val Thr Tyr Asp Gly Phe	95	100	105
Asn Thr Phe Thr Ile Pro Lys Thr Asp Tyr Asp Asn Phe Leu Met	110	115	120
Ala His Leu Ile Asn Glu Lys Asp Gly Glu Thr Phe Gln Leu Met	125	130	135
Gly Leu Tyr Gly Arg Glu Pro Asp Leu Ser Ser Asp Ile Lys Glu	140	145	150
Arg Phe Ala Gln Leu Cys Glu Glu His Gly Ile Leu Arg Glu Asn	155	160	165
Ile Ile Asp Leu Ser Asn Ala Asn Arg Cys Leu Gln Ala Arg Glu	170	175	180

<210> 197
 <211> 766
 <212> DNA
 <213> Homo Sapien

<400> 197
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 gacatcctgc aatggattca gcctgctggt tctactgctg ttaggagtag 100
 ttctcaatgc gatacctcta attgtcagct tagttgagga agaccaattt 150
 tctcaaaacc ccatctcttg ctttgagtgg tggttccag gaattatagg 200
 agcaggtctg atggccattc cagcaacaac aatgtccttg acagcaagaa 250
 aaagagcgtg ctgcaacaac agaactggaa tggtttctttc atcatttttc 300
 agtgtgatca cagtcattgg tgctctgtat tgcattgctga tatccatcca 350
 ggctctctta aaaggtcctc tcatgtgtaa ttctccaagc aacagtaatg 400
 ccaattgtga attttcattg aaaaacatca gtgacattca tccagaatcc 450
 ttcaacttgc agtggttttt caatgactct tgtgcacctc ctactggttt 500

caataaaccc accagtaacg acaccatggc gagtggctgg agagcatcta 550
 gtttccactt cgattctgaa gaaaacaaac ataggcttat ccacttctca 600
 gtatttttag gtctattgct tgttggaatt ctggaggtcc tgtttgggct 650
 cagtcagata gtcacgggtt tccttggctg tctgtgtgga gtctctaagc 700
 gaagaagtca aattgtgtag tttaatggga ataaaatgta agtatcagta 750
 gtttgaaaaa aaaaaa 766

<210> 198

<211> 229

<212> PRT

<213> Homo Sapien

<400> 198

Met	Thr	Cys	Cys	Glu	Gly	Trp	Thr	Ser	Cys	Asn	Gly	Phe	Ser	Leu	1	5	10	15
Leu	Val	Leu	Leu	Leu	Leu	Gly	Val	Val	Leu	Asn	Ala	Ile	Pro	Leu	20	25	30	
Ile	Val	Ser	Leu	Val	Glu	Glu	Asp	Gln	Phe	Ser	Gln	Asn	Pro	Ile	35	40	45	
Ser	Cys	Phe	Glu	Trp	Trp	Phe	Pro	Gly	Ile	Ile	Gly	Ala	Gly	Leu	50	55	60	
Met	Ala	Ile	Pro	Ala	Thr	Thr	Met	Ser	Leu	Thr	Ala	Arg	Lys	Arg	65	70	75	
Ala	Cys	Cys	Asn	Asn	Arg	Thr	Gly	Met	Phe	Leu	Ser	Ser	Phe	Phe	80	85	90	
Ser	Val	Ile	Thr	Val	Ile	Gly	Ala	Leu	Tyr	Cys	Met	Leu	Ile	Ser	95	100	105	
Ile	Gln	Ala	Leu	Leu	Lys	Gly	Pro	Leu	Met	Cys	Asn	Ser	Pro	Ser	110	115	120	
Asn	Ser	Asn	Ala	Asn	Cys	Glu	Phe	Ser	Leu	Lys	Asn	Ile	Ser	Asp	125	130	135	
Ile	His	Pro	Glu	Ser	Phe	Asn	Leu	Gln	Trp	Phe	Phe	Asn	Asp	Ser	140	145	150	
Cys	Ala	Pro	Pro	Thr	Gly	Phe	Asn	Lys	Pro	Thr	Ser	Asn	Asp	Thr	155	160	165	
Met	Ala	Ser	Gly	Trp	Arg	Ala	Ser	Ser	Phe	His	Phe	Asp	Ser	Glu	170	175	180	
Glu	Asn	Lys	His	Arg	Leu	Ile	His	Phe	Ser	Val	Phe	Leu	Gly	Leu	185	190	195	
Leu	Leu	Val	Gly	Ile	Leu	Glu	Val	Leu	Phe	Gly	Leu	Ser	Gln	Ile				

Val Ile Gly Phe Leu Gly Cys Leu Cys Gly Val Ser Lys Arg Arg
215 220 225

Ser Gln Ile Val

<210> 199
<211> 636
<212> DNA
<213> Homo Sapien

<400> 199
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gcaggacact ggtgaaggag cagtgaggaa cctgcagagt cacacagttg 100
ctgaccaatt gagctgtgag cctggagcag atccgtgggc tgcagacccc 150
cgccccagtg cctctcccc tgcagccctg cccctcgaac tgtgacatgg 200
agagagtgc cctggccctt ctctactgg caggcctgac tgccttgga 250
gccaatgacc catttgccaa taaagacgat cccttctact atgactggaa 300
aaacctgcag ctgagcggac tgatctgcgg agggctcctg gccattgctg 350
ggatcgcggc agttctgagt ggcaaatgca aatacaagag cagccagaag 400
cagcacagtc ctgtacctga gaaggccatc ccactcatca ctccaggctc 450
tgccactact tgctgagcac aggactggcc tccagggatg gcctgaagcc 500
taacactggc cccagcacc tcctcccctg ggaggcctta tcctcaagga 550
aggacttctc tccaagggca ggctgttagg cccctttctg atcaggaggc 600
ttctttatga attaaactcg cccaccacc ccctca 636

<210> 200
<211> 89
<212> PRT
<213> Homo Sapien

<400> 200
Met Glu Arg Val Thr Leu Ala Leu Leu Leu Leu Ala Gly Leu Thr
1 5 10 15
Ala Leu Glu Ala Asn Asp Pro Phe Ala Asn Lys Asp Asp Pro Phe
20 25 30
Tyr Tyr Asp Trp Lys Asn Leu Gln Leu Ser Gly Leu Ile Cys Gly
35 40 45
Gly Leu Leu Ala Ile Ala Gly Ile Ala Ala Val Leu Ser Gly Lys
50 55 60

Cys Lys Tyr Lys Ser Ser Gln Lys Gln His Ser Pro Val Pro Glu
65 70 75

Lys Ala Ile Pro Leu Ile Thr Pro Gly Ser Ala Thr Thr Cys
80 85

<210> 201
<211> 1734
<212> DNA
<213> Homo Sapien

<400> 201
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gcacagagac gcagagcaag ggcggcaagg aggagaccct ggtgggagga 150
agacactctg gagagagagg gggctgggca gagatgaagt tccagggggcc 200
cctggcctgc ctctgctgg ccctctgcct gggcagtggg gaggctggcc 250
ccctgcagag cggagaggaa agcactggga caaatattgg ggaggccctt 300
ggacatggcc tgggagacgc cctgagcgaa ggggtgggaa aggccattgg 350
caaagaggcc ggaggggag ctggctctaa agtcagtggg gcccttggcc 400
aagggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450
ggcgagcag atgctttggg caacagggtc ggggaagcag cccatgctct 500
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caacactcag ggagctgtgg ccagcctgg ctatggttca gtgagagcca 850
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cagtggcagc aatggtgaca acaacaatgg cagcagcagt ggtggcagca 1000
gcagtggcag cagcagtggc agcagcagt gcggcagcag tggcggcagc 1050
agtgggtggc gcagtggcaa cagtgggtggc agcagaggtg acagcggcag 1100
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 gaggctctgg agacaattat cgggggcaag ggtcgagctg gggcagtgga 1350
 ggaggtgacg ctggttggtg agtcaatact gtgaactctg agacgtctcc 1400
 tgggatgttt aactttgaca ctttctggaa gaattttaaa tccaagctgg 1450
 gtttcatcaa ctgggatgcc ataaacaagg accagagaag ctctcgcac 1500
 ccgtgacctc cagacaagga gccaccagat tggatgggag ccccccact 1550
 ccctccttaa aacaccaccc tctcatcact aatctcagcc cttgcccttg 1600
 aaataaacct tagctgcccc acaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1734

<210> 202
 <211> 440
 <212> PRT
 <213> Homo Sapien

<400> 202
 Met Lys Phe Gln Gly Pro Leu Ala Cys Leu Leu Leu Ala Leu Cys
 1 5 10 15
 Leu Gly Ser Gly Glu Ala Gly Pro Leu Gln Ser Gly Glu Glu Ser
 20 25 30
 Thr Gly Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp
 35 40 45
 Ala Leu Ser Glu Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly
 50 55 60
 Gly Ala Ala Gly Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr
 65 70 75
 Arg Glu Ala Val Gly Thr Gly Val Arg Gln Val Pro Gly Phe Gly
 80 85 90
 Ala Ala Asp Ala Leu Gly Asn Arg Val Gly Glu Ala Ala His Ala
 95 100 105
 Leu Gly Asn Thr Gly His Glu Ile Gly Arg Gln Ala Glu Asp Val
 110 115 120
 Ile Arg His Gly Ala Asp Ala Val Arg Gly Ser Trp Gln Gly Val
 125 130 135
 Pro Gly His Ser Gly Ala Trp Glu Thr Ser Gly Gly His Gly Ile

				140					145					150	
Phe	Gly	Ser	Gln	Gly	Gly	Leu	Gly	Gly	Gln	Gly	Gln	Gly	Asn	Pro	
				155					160					165	
Gly	Gly	Leu	Gly	Thr	Pro	Trp	Val	His	Gly	Tyr	Pro	Gly	Asn	Ser	
				170					175					180	
Ala	Gly	Ser	Phe	Gly	Met	Asn	Pro	Gln	Gly	Ala	Pro	Trp	Gly	Gln	
				185					190					195	
Gly	Gly	Asn	Gly	Gly	Pro	Pro	Asn	Phe	Gly	Thr	Asn	Thr	Gln	Gly	
				200					205					210	
Ala	Val	Ala	Gln	Pro	Gly	Tyr	Gly	Ser	Val	Arg	Ala	Ser	Asn	Gln	
				215					220					225	
Asn	Glu	Gly	Cys	Thr	Asn	Pro	Pro	Pro	Ser	Gly	Ser	Gly	Gly	Gly	
				230					235					240	
Ser	Ser	Asn	Ser	Gly	Gly	Gly	Ser	Gly	Ser	Gln	Ser	Gly	Ser	Ser	
				245					250					255	
Gly	Ser	Gly	Ser	Asn	Gly	Asp	Asn	Asn	Asn	Gly	Ser	Ser	Ser	Gly	
				260					265					270	
Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Gly	Gly	Ser	
				275					280					285	
Ser	Gly	Gly	Ser	Ser	Gly	Gly	Ser	Ser	Gly	Asn	Ser	Gly	Gly	Ser	
				290					295					300	
Arg	Gly	Asp	Ser	Gly	Ser	Glu	Ser	Ser	Trp	Gly	Ser	Ser	Thr	Gly	
				305					310					315	
Ser	Ser	Ser	Gly	Asn	His	Gly	Gly	Ser	Gly	Gly	Gly	Asn	Gly	His	
				320					325					330	
Lys	Pro	Gly	Cys	Glu	Lys	Pro	Gly	Asn	Glu	Ala	Arg	Gly	Ser	Gly	
				335					340					345	
Glu	Ser	Gly	Ile	Gln	Gly	Phe	Arg	Gly	Gln	Gly	Val	Ser	Ser	Asn	
				350					355					360	
Met	Arg	Glu	Ile	Ser	Lys	Glu	Gly	Asn	Arg	Leu	Leu	Gly	Gly	Ser	
				365					370					375	
Gly	Asp	Asn	Tyr	Arg	Gly	Gln	Gly	Ser	Ser	Trp	Gly	Ser	Gly	Gly	
				380					385					390	
Gly	Asp	Ala	Val	Gly	Gly	Val	Asn	Thr	Val	Asn	Ser	Glu	Thr	Ser	
				395					400					405	
Pro	Gly	Met	Phe	Asn	Phe	Asp	Thr	Phe	Trp	Lys	Asn	Phe	Lys	Ser	
				410					415					420	
Lys	Leu	Gly	Phe	Ile	Asn	Trp	Asp	Ala	Ile	Asn	Lys	Asp	Gln	Arg	
				425					430					435	

Ser Ser Arg Ile Pro
440

<210> 203
<211> 1676
<212> DNA
<213> Homo Sapien

<400> 203
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actcctgctg ctggttgtgg gctcctggct actcgccgc atcctggctt 150
ggacctatgc cttctataac aactgccgc ggctccagtg tttcccacag 200
ccccaaaac ggaactgggt ttggggtcac ctgggcctga tcaactctac 250
agaggagggc ttgaaggact cgaccagat gtcggccacc tattcccagg 300
gctttacggg atggctgggt cccatcatcc ccttcatcgt tttatgccac 350
cctgacacca tccggtctat caccaatgcc tcagctgcca ttgcacccaa 400
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cggcgcttcc acagggcctg ccgcctgggt catgacttca cagacgctgt 850
catccgggag cggcgctgca cctccccac tcagggtatt gatgattttt 900
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ctgagcaagg atgaagatgg gaaggcattg tcagatgagg atataagagc 1000
agaggctgac accttcatgt ttggaggcca tgacaccacg gccagtggcc 1050
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caggacattg ttctcccaga tggccgagtc atccccaag gcattacctg 1300
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 tgcacttccg gttcctgcca gaccacactg agccccgcag gaagctggaa 1550
 ttgatcatgc gcgccgaggg cgggctttgg ctgcgggtgg agcccctgaa 1600
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 gtcatgaata aaacggtgct gtcaaa 1676

<210> 204

<211> 524

<212> PRT

<213> Homo Sapien

<400> 204

Met	Ser	Leu	Leu	Ser	Leu	Pro	Trp	Leu	Gly	Leu	Arg	Pro	Val	Ala	1	5	10	15
Met	Ser	Pro	Trp	Leu	Leu	Leu	Leu	Leu	Val	Val	Gly	Ser	Trp	Leu	20	25	30	
Leu	Ala	Arg	Ile	Leu	Ala	Trp	Thr	Tyr	Ala	Phe	Tyr	Asn	Asn	Cys	35	40	45	
Arg	Arg	Leu	Gln	Cys	Phe	Pro	Gln	Pro	Pro	Lys	Arg	Asn	Trp	Phe	50	55	60	
Trp	Gly	His	Leu	Gly	Leu	Ile	Thr	Pro	Thr	Glu	Glu	Gly	Leu	Lys	65	70	75	
Asp	Ser	Thr	Gln	Met	Ser	Ala	Thr	Tyr	Ser	Gln	Gly	Phe	Thr	Val	80	85	90	
Trp	Leu	Gly	Pro	Ile	Ile	Pro	Phe	Ile	Val	Leu	Cys	His	Pro	Asp	95	100	105	
Thr	Ile	Arg	Ser	Ile	Thr	Asn	Ala	Ser	Ala	Ala	Ile	Ala	Pro	Lys	110	115	120	
Asp	Asn	Leu	Phe	Ile	Arg	Phe	Leu	Lys	Pro	Trp	Leu	Gly	Glu	Gly	125	130	135	
Ile	Leu	Leu	Ser	Gly	Gly	Asp	Lys	Trp	Ser	Arg	His	Arg	Arg	Met	140	145	150	
Leu	Thr	Pro	Ala	Phe	His	Phe	Asn	Ile	Leu	Lys	Ser	Tyr	Ile	Thr	155	160	165	
Ile	Phe	Asn	Lys	Ser	Ala	Asn	Ile	Met	Leu	Asp	Lys	Trp	Gln	His				

	170	175	180
Leu Ala Ser Glu Gly Ser Ser Arg Leu Asp Met Phe Glu His Ile	185	190	195
Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe Ser Phe	200	205	210
Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr Ile	215	220	225
Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Ser Gln His Ile Leu	230	235	240
Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Arg Arg	245	250	255
Phe His Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val	260	265	270
Ile Arg Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly Ile Asp Asp	275	280	285
Phe Phe Lys Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe Ile Asp	290	295	300
Val Leu Leu Leu Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser Asp	305	310	315
Glu Asp Ile Arg Ala Glu Ala Asp Thr Phe Met Phe Gly Gly His	320	325	330
Asp Thr Thr Ala Ser Gly Leu Ser Trp Val Leu Tyr Asn Leu Ala	335	340	345
Arg His Pro Glu Tyr Gln Glu Arg Cys Arg Gln Glu Val Gln Glu	350	355	360
Leu Leu Lys Asp Arg Asp Pro Lys Glu Ile Glu Trp Asp Asp Leu	365	370	375
Ala Gln Leu Pro Phe Leu Thr Met Cys Val Lys Glu Ser Leu Arg	380	385	390
Leu His Pro Pro Ala Pro Phe Ile Ser Arg Cys Cys Thr Gln Asp	395	400	405
Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys Gly Ile Thr Cys	410	415	420
Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr Val Trp Pro	425	430	435
Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu Asn Ser	440	445	450
Lys Gly Arg Ser Pro Leu Ala Phe Ile Pro Phe Ser Ala Gly Pro	455	460	465

Arg	Asn	Cys	Ile	Gly	Gln	Ala	Phe	Ala	Met	Ala	Glu	Met	Lys	Val
				470					475					480
Val	Leu	Ala	Leu	Met	Leu	Leu	His	Phe	Arg	Phe	Leu	Pro	Asp	His
				485					490					495
Thr	Glu	Pro	Arg	Arg	Lys	Leu	Glu	Leu	Ile	Met	Arg	Ala	Glu	Gly
				500					505					510
Gly	Leu	Trp	Leu	Arg	Val	Glu	Pro	Leu	Asn	Val	Gly	Leu	Gln	
				515					520					

<210> 205
 <211> 2401
 <212> DNA
 <213> Homo Sapien

<400> 205
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 ccttgaggtg tgaacccaca tccctgcccc cagggccacc tgcaggacgc 150
 cgacacctac ccctcagcag acgccggaga gaaatgagta gcaacaaaga 200
 gcagcgggtca gcagtgttcg tgatcctctt tgccctcatc accatcctca 250
 tcctctacag ctccaacagt gccaatgagg tcttccatta cggtccctg 300
 cggggccgta gccgccgacc tgtcaacctc aagaagtgga gcatcactga 350
 cggctatgtc ccctattctc gcaacaagac actgccctct cggtgccacc 400
 agtgtgtgat tgtcagcagc tccagccacc tgctgggcac caagctgggc 450
 cctgagatcg agcgggctga gtgtacaatc cgcataaatg atgcacccac 500
 cactggctac tcagctgatg tgggcaacaa gaccacctac cgcgtcgtgg 550
 cccattccag tgtgttccgc gtgctgagga ggccccagga gtttgtcaac 600
 cggacccctg aaaccgtgtt catcttcttg gggccccga gcaagatgca 650
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 cgaatgtgtc acctacatcc agaatgagca cagtcgcaag ggcaaccacc 1000

accgcttcat caccgagaaa aggggtcttct catcgtgggc ccagctgtat 1050
 ggcatcacct tctcccaccc ctctggacc taggccaccc agcctgtggg 1100
 acctcaggag ggtcagagga gaagcagcct ccgcccagcc gctaggccag 1150
 ggaccatctt ctggccaatc aaggcttgct ggagtgtctc ccagccaatc 1200
 agggccttga ggaggatgta tcctccagcc aatcagggcc tggggaatct 1250
 gttggcgaat cagggatttg ggagtctatg tggttaatca ggggtgtctt 1300
 tcttgtgcag tcagggctctg cgcacagtca atcagggtag agggggtatt 1350
 tctgagtcaa tctgaggcta aggacatgtc ctttcccatg aggccttggt 1400
 tcagagcccc aggaatggac cccccaatca ctcccactc tgctgggata 1450
 atggggctct gtcccaagga gctgggaact tgggtgttgc ccctcaattt 1500
 ccagcaccag aaagagagat tgtgtggggg tagaagctgt ctggaggccc 1550
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 ccagagggtg gaggctggca tccaggctct ggctctgccc tgagaccttg 1650
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 gtatttttgc gcaaactcct tcagggttgg gggactctga aggaaacggg 1900
 aaaaaacctt aagctgtttt cttagccct cagccagctg ccattagctt 1950
 ggctcttaaa gggccaggcc tccttttctg ccctctagca gggagggttt 2000
 ccaactgttg gaggcgcctt tggggctgcc cctttgtctg gagtcactgg 2050
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 ggagctgtat cacctgggtt ctgtcccctg gctctgtatc aggcacttta 2150
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 tggaaggaaa gggcttcagg aggaggctgt gaggctggag ggaccagatg 2250
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 ctacgctccg gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2400
 a 2401

<210> 206
 <211> 299
 <212> PRT
 <213> Homo Sapien

<400> 206

Met	Ser	Ser	Asn	Lys	Glu	Gln	Arg	Ser	Ala	Val	Phe	Val	Ile	Leu	
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Phe	Ala	Leu	Ile	Thr	Ile	Leu	Ile	Leu	Tyr	Ser	Ser	Asn	Ser	Ala	
				20					25					30	
Asn	Glu	Val	Phe	His	Tyr	Gly	Ser	Leu	Arg	Gly	Arg	Ser	Arg	Arg	
				35					40					45	
Pro	Val	Asn	Leu	Lys	Lys	Trp	Ser	Ile	Thr	Asp	Gly	Tyr	Val	Pro	
				50					55					60	
Ile	Leu	Gly	Asn	Lys	Thr	Leu	Pro	Ser	Arg	Cys	His	Gln	Cys	Val	
				65					70					75	
Ile	Val	Ser	Ser	Ser	Ser	His	Leu	Leu	Gly	Thr	Lys	Leu	Gly	Pro	
				80					85					90	
Glu	Ile	Glu	Arg	Ala	Glu	Cys	Thr	Ile	Arg	Met	Asn	Asp	Ala	Pro	
				95					100					105	
Thr	Thr	Gly	Tyr	Ser	Ala	Asp	Val	Gly	Asn	Lys	Thr	Thr	Tyr	Arg	
				110					115					120	
Val	Val	Ala	His	Ser	Ser	Val	Phe	Arg	Val	Leu	Arg	Arg	Pro	Gln	
				125					130					135	
Glu	Phe	Val	Asn	Arg	Thr	Pro	Glu	Thr	Val	Phe	Ile	Phe	Trp	Gly	
				140					145					150	
Pro	Pro	Ser	Lys	Met	Gln	Lys	Pro	Gln	Gly	Ser	Leu	Val	Arg	Val	
				155					160					165	
Ile	Gln	Arg	Ala	Gly	Leu	Val	Phe	Pro	Asn	Met	Glu	Ala	Tyr	Ala	
				170					175					180	
Val	Ser	Pro	Gly	Arg	Met	Arg	Gln	Phe	Asp	Asp	Leu	Phe	Arg	Gly	
				185					190					195	
Glu	Thr	Gly	Lys	Asp	Arg	Glu	Lys	Ser	His	Ser	Trp	Leu	Ser	Thr	
				200					205					210	
Gly	Trp	Phe	Thr	Met	Val	Ile	Ala	Val	Glu	Leu	Cys	Asp	His	Val	
				215					220					225	
His	Val	Tyr	Gly	Met	Val	Pro	Pro	Asn	Tyr	Cys	Ser	Gln	Arg	Pro	
				230					235					240	
Arg	Leu	Gln	Arg	Met	Pro	Tyr	His	Tyr	Tyr	Glu	Pro	Lys	Gly	Pro	
				245					250					255	
Asp	Glu	Cys	Val	Thr	Tyr	Ile	Gln	Asn	Glu	His	Ser	Arg	Lys	Gly	

Asn His His Arg Phe Ile Thr Glu Lys Arg Val Phe Ser Ser Trp
 275 280 285

Ala Gln Leu Tyr Gly Ile Thr Phe Ser His Pro Ser Trp Thr
 290 295

<210> 207
 <211> 2694
 <212> DNA
 <213> Homo Sapien

<400> 207
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 gtcgtggagc caggagcgac gtcaccgccca tggcaggcat caaagctttg 100
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 atgtgccctt ccaatataca acaaatactg gccctctttt gttctatttt 200
 tttacatcct ttcacctatt ccatactgca tagcaagaag attagtggat 250
 gatacagatg ctatgagtaa cgcttgtaag gaacttgcca tctttcttac 300
 aacgggcatt gtcgtgtcag cttttggact ccctattgta tttgccagag 350
 cacatctgat tgagtgggga gcttgtgcac ttgttctcac aggaaacaca 400
 gtcacttttg caactatact aggccttttc ttggtctttg gaagcaatga 450
 cgacttcagc tggcagcagt ggtgaaaaga aattactgaa ctattgtcaa 500
 atggacttcc tgtcatttgt tggccattca cgcacacagg agatggggca 550
 gttaatgctg aatggtatag caagcctctt gggggatatt taggtgctcc 600
 cttctcactt ttattgtaag catactattt tcacagagac ttgctgaagg 650
 attaaaagga ttttctcttt tggaaaagct tgactgattt cacacttatt 700
 tatagtatgc tttttgtggt gtctgctga atttaaatat ttatgtgttt 750
 ttctgttag gttgattttt tttggaatca atatgcaatg ttaaactt 800
 ttttaatgta atcatttgca ttggttagga attcagaatt ccgccggctc 850
 tattactggt caagtacatc ttttctctta aaattattta gcctccatta 900
 ttacaaaaaa ttataaaaat aagttttcag tcagtcagga tgacatcact 950
 cccaatgtta tgcagacata cagacggttg gcatacgtta tagactgtat 1000
 actcagtgca aatatagctg catttataacc tcagaggggc caagtgttaa 1050
 tgcccatgcc ctccgttaag ggttggttgg tttactggta gacagatgtt 1100

ttgtggattg aaaattatct tatggaattg ctacagagga gtgcttttct 1150
 tctcaattgt tagaagaatt tatgttaaac ttttaaggtaa ggggtgtaaaa 1200
 acatctttga gataagggtt ttatttatgt ttattattgt tagagtgagt 1250
 tgcaatgtgg gaagaaatga cattgaaatt ccagtttttg aatcctgttt 1300
 ctatttataa gtgaaatttg tgatctccta tcaacctttc atgttttacc 1350
 ctgttaaaat ggacatacat ggaaccacta ctgatgaggg acagttgtat 1400
 gtttgcatca tatatgccag aaaaccttcc tctgcttcc ctttttgact 1450
 tatttggtat gttgtatata ttacataaaa taacttttca aatatagttt 1500
 aataacactt agaagtgttt acttacctgg aaaataattg ctatgccgta 1550
 cattcagagt gccccctccc ctgcaaggcc ttgccatgat taacaagtaa 1600
 cttgttagtc ttacagataa ttcatgcatt aacagtttaa gatttagacc 1650
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 agtattttta agacaagttt cctgtatacc tctgaactgt tttgattttg 1750
 agttcatcat gatagatctg ctgtttcctt ataaaaggca tttgttgtgt 1800
 gagttaatgc aaagtagcca agtccagcta tatagcagct tcagaaacat 1850
 acctgaccaa aaaattccca gtaaccaggc atgatcaatt tatagtggtc 1900
 gtttacatct aataattatc aggacttttt tcaggagtgg gttataaaaa 1950
 cattcaagtt ggtctgacag tattttgtta aggataattg tttgtatgtt 2000
 tattcagtat acttacataa aaattatttc gccatcagcc aaaactcagt 2050
 aatcatgaca gctgtctgtt gttttatgaa gtttatttct caagaaaatg 2100
 ggaataaatt tgggatttgt tcagcttttt tactaaagat gcctaaagcc 2150
 acaggtttta ttgcctaact taagccatga cttttagata tgagatgacg 2200
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 ggtacacatg agttagagag ctggtgagac agttgggaac tctttgtgct 2350
 tgtgatctac tggacttttt ttttgcagga agtgcattct ctggtccttc 2400
 cctattttct gttctggatg tcagtgcagt gcaactgctac tgttttatcc 2450
 acttgccac agactttttc taacagctgc gtattatttc tatatactaa 2500
 ttgcattggc agcattgtgt ctttgacctt gtatactagc ttgacatagt 2550

gctgtctctg atttctaggc tagttacttg agatatgaat tttccataga 2600
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 tgatgaaaca ataaagattt taaatatcta ttttaaaaaa aaaa 2694

<210> 208
 <211> 131
 <212> PRT
 <213> Homo Sapien

<400> 208
 Met Ala Gly Ile Lys Ala Leu Ile Ser Leu Ser Phe Gly Gly Ala
 1 5 10 15
 Ile Gly Leu Met Phe Leu Met Leu Gly Cys Ala Leu Pro Ile Tyr
 20 25 30
 Asn Lys Tyr Trp Pro Leu Phe Val Leu Phe Phe Tyr Ile Leu Ser
 35 40 45
 Pro Ile Pro Tyr Cys Ile Ala Arg Arg Leu Val Asp Asp Thr Asp
 50 55 60
 Ala Met Ser Asn Ala Cys Lys Glu Leu Ala Ile Phe Leu Thr Thr
 65 70 75
 Gly Ile Val Val Ser Ala Phe Gly Leu Pro Ile Val Phe Ala Arg
 80 85 90
 Ala His Leu Ile Glu Trp Gly Ala Cys Ala Leu Val Leu Thr Gly
 95 100 105
 Asn Thr Val Ile Phe Ala Thr Ile Leu Gly Phe Phe Leu Val Phe
 110 115 120
 Gly Ser Asn Asp Asp Phe Ser Trp Gln Gln Trp
 125 130

<210> 209
 <211> 1172
 <212> DNA
 <213> Homo Sapien

<400> 209
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 ccacttgtgt tctctctcct ggtgcagagt tgcaagcaag tttatcagag 100
 tatcgccatg aagtctgtcc cctgcctcct gctggtgacc ttgtcctgcc 150
 tgggggacttt gggtcaggcc ccgaggcaaa agcaaggaag cactggggag 200
 gaattccatt tccagactgg agggagagat tcctgcacta tgcgtcccag 250
 cagcttgggg caaggtgctg gagaagtctg gcttcgcgtc gactgccgca 300
 acacagacca gacctactgg tgtgagtaca gggggcagcc cagcatgtgc 350

caggcttttg ctgctgaccc caaaccttac tggaatcaag ccctgcagga 400
 gctgaggcgc cttcaccatg cgtgccaggg ggccccggtg cttaggccat 450
 ccgtgtgcag ggaggctgga ccccaggccc atatgcagca ggtgacttcc 500
 agcctcaagg gcagcccaga gcccaaccag cagcctgagg ctgggacgcc 550
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 gaaaggactc gatggaagag ctgggaaaag ccaaaccac caccgaccc 650
 acagccaaac ctaccagacc tggaccaggg cccggaggga atgaggaagc 700
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 tgggcccag agtgacaagc atacacaact acttattatc tgtagaagtt 1050
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 agaatgattt cagaaaaaaa aa 1172

<210> 210
 <211> 223
 <212> PRT
 <213> Homo Sapien

<400> 210
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 1 5 10 15
 Gly Thr Leu Gly Gln Ala Pro Arg Gln Lys Gln Gly Ser Thr Gly
 20 25 30
 Glu Glu Phe His Phe Gln Thr Gly Gly Arg Asp Ser Cys Thr Met
 35 40 45
 Arg Pro Ser Ser Leu Gly Gln Gly Ala Gly Glu Val Trp Leu Arg
 50 55 60
 Val Asp Cys Arg Asn Thr Asp Gln Thr Tyr Trp Cys Glu Tyr Arg
 65 70 75
 Gly Gln Pro Ser Met Cys Gln Ala Phe Ala Ala Asp Pro Lys Pro
 80 85 90

Tyr	Trp	Asn	Gln	Ala	Leu	Gln	Glu	Leu	Arg	Arg	Leu	His	His	Ala
				95					100					105
Cys	Gln	Gly	Ala	Pro	Val	Leu	Arg	Pro	Ser	Val	Cys	Arg	Glu	Ala
				110					115					120
Gly	Pro	Gln	Ala	His	Met	Gln	Gln	Val	Thr	Ser	Ser	Leu	Lys	Gly
				125					130					135
Ser	Pro	Glu	Pro	Asn	Gln	Gln	Pro	Glu	Ala	Gly	Thr	Pro	Ser	Leu
				140					145					150
Arg	Pro	Lys	Ala	Thr	Val	Lys	Leu	Thr	Glu	Ala	Thr	Gln	Leu	Gly
				155					160					165
Lys	Asp	Ser	Met	Glu	Glu	Leu	Gly	Lys	Ala	Lys	Pro	Thr	Thr	Arg
				170					175					180
Pro	Thr	Ala	Lys	Pro	Thr	Gln	Pro	Gly	Pro	Arg	Pro	Gly	Gly	Asn
				185					190					195
Glu	Glu	Ala	Lys	Lys	Lys	Ala	Trp	Glu	His	Cys	Trp	Lys	Pro	Phe
				200					205					210
Gln	Ala	Leu	Cys	Ala	Phe	Leu	Ile	Ser	Phe	Phe	Arg	Gly		
				215					220					

<210> 211
 <211> 708
 <212> DNA
 <213> Homo Sapien

<400> 211
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 ccggcgggcg cgttgagttc ccggcggaca agatggtgtc agtcctggtg 200
 caagaaggtc acgccgtctc agacatgctc ctgccgctgg atggggaact 250
 cgctctgggt tcaggagccg gattcggcgt etcagacgtg ggctcgcacc 300
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 tgcggtgtccg cagcatctcg gctctgggcc ggacgttcac gcgcgacgag 550
 gacctggctg ttttctgggc gtcccgcgcg ggccgcctac gcttcacagg 600
 gccgggcgcg ctgagcgtgg gccccgagga ctgcgcggac ccgtcggggt 650

gcgtctgcgg caacgcggag gcgcagccgt ggatctgcgc ggccctgctc 700

cagcccct 708

<210> 212

<211> 197

<212> PRT

<213> Homo Sapien

<400> 212

Met	Gly	Val	Leu	Gly	Arg	Val	Leu	Leu	Trp	Leu	Gln	Leu	Cys	Ala
1				5					10					15

Leu	Thr	Gln	Ala	Val	Ser	Lys	Leu	Trp	Val	Pro	Asn	Thr	Asp	Phe
				20					25					30

Asp	Val	Ala	Ala	Asn	Trp	Ser	Gln	Asn	Arg	Thr	Pro	Cys	Ala	Gly
				35					40					45

Gly	Ala	Val	Glu	Phe	Pro	Ala	Asp	Lys	Met	Val	Ser	Val	Leu	Val
				50					55					60

Gln	Glu	Gly	His	Ala	Val	Ser	Asp	Met	Leu	Leu	Pro	Leu	Asp	Gly
				65					70					75

Glu	Leu	Val	Leu	Ala	Ser	Gly	Ala	Gly	Phe	Gly	Val	Ser	Asp	Val
				80					85					90

Gly	Ser	His	Leu	Asp	Cys	Gly	Ala	Gly	Glu	Pro	Ala	Val	Phe	Arg
				95					100					105

Asp	Ser	Asp	Arg	Phe	Ser	Trp	His	Asp	Arg	Thr	Cys	Gly	Ala	Leu
				110					115					120

Gly	Thr	Arg	His	Leu	Ala	Ser	Ser	Ser	Trp	Thr	Pro	Ser	Ala	Cys
				125					130					135

Pro	Ala	Ala	Thr	Thr	Thr	Ser	Ser	Phe	Arg	Leu	Val	Pro	Pro	Ser
				140					145					150

Ala	Trp	Gly	Ser	Ala	Leu	Ala	Leu	Ala	Pro	Cys	Val	Ser	Ala	Ala
				155					160					165

Ser	Arg	Leu	Trp	Ala	Gly	Arg	Ser	Arg	Ala	Thr	Arg	Thr	Trp	Leu
				170					175					180

Phe	Ser	Trp	Arg	Pro	Ala	Arg	Ala	Ala	Tyr	Ala	Ser	Thr	Gly	Arg
				185					190					195

Ala Arg

<210> 213

<211> 644

<212> DNA

<213> Homo Sapien

<400> 213

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 agggaggtga agaaaccaag acgcagagag gccaaagcccc ttgccttggg 150
 tcacacagcc aaaggaggca gagccagaac tcacaaccag atccagaggc 200
 aacagggaca tggccacctg ggacgaaaag gcagtcaccc gcagggccaa 250
 ggtggctccc gctgagagga tgagcaagtt ctttaaggcac ttcacggctg 300
 tgggagacga ctaccatgcc tggaaacatca actacaagaa atgggagaat 350
 gaagaggagg aggaggagga ggagcagcca ccacccacac cagtctcagg 400
 cgaggaaggc agagctgcag cccctgacgt tgccccctgcc cctggccccg 450
 caccagggc ccccttgac ttcaggggca tggtgaggaa actgttcagc 500
 tcccacaggt ttcaggtcat catcatctgc ttggtggttc tggatgcct 550
 cctggtgctt gctgagctca tcctggacct gaagatcatc cagcccgaca 600
 agaataacta tgctgccatg gtattccact acatgagcat caccatcttg 650
 gtctttttta tgatggagat catctttaa ttatttgtct tccgcctgag 700
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 cattcatcct ggacattgtc ctctgttcc aggagcacca gtttgaggct 800
 ctgggcctgc tgattctgct ccggctgtgg cgggtggccc ggatcatcaa 850
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 agctgctctg agaagcccct ggactgatga gtttgctgta tcaacctgta 1000
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 ctctcacaca gccaccgtga aagtcctgga gtaaaatgtg ctgtgtacag 1100
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 agagaacctg acagtcactg gccagttatc acttcagatt acaaatacaca 1200
 cagagcatct gcctgttttc aatcacaga gaacaaaacc aaaatctata 1250
 aagatattct gaaaatatga cagaatttga caaataaaag cataaacgtg 1300
 taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 1337

<210> 216
 <211> 255
 <212> PRT
 <213> Homo Sapien
 <400> 216

Met	Ala	Thr	Trp	Asp	Glu	Lys	Ala	Val	Thr	Arg	Arg	Ala	Lys	Val	1	5	10	15
Ala	Pro	Ala	Glu	Arg	Met	Ser	Lys	Phe	Leu	Arg	His	Phe	Thr	Val	20	25	30	
Val	Gly	Asp	Asp	Tyr	His	Ala	Trp	Asn	Ile	Asn	Tyr	Lys	Lys	Trp	35	40	45	
Glu	Asn	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gln	Pro	Pro	Pro	Thr	50	55	60	
Pro	Val	Ser	Gly	Glu	Glu	Gly	Arg	Ala	Ala	Ala	Pro	Asp	Val	Ala	65	70	75	
Pro	Ala	Pro	Gly	Pro	Ala	Pro	Arg	Ala	Pro	Leu	Asp	Phe	Arg	Gly	80	85	90	
Met	Leu	Arg	Lys	Leu	Phe	Ser	Ser	His	Arg	Phe	Gln	Val	Ile	Ile	95	100	105	
Ile	Cys	Leu	Val	Val	Leu	Asp	Ala	Leu	Leu	Val	Leu	Ala	Glu	Leu	110	115	120	
Ile	Leu	Asp	Leu	Lys	Ile	Ile	Gln	Pro	Asp	Lys	Asn	Asn	Tyr	Ala	125	130	135	
Ala	Met	Val	Phe	His	Tyr	Met	Ser	Ile	Thr	Ile	Leu	Val	Phe	Phe	140	145	150	
Met	Met	Glu	Ile	Ile	Phe	Lys	Leu	Phe	Val	Phe	Arg	Leu	Ser	Ser	155	160	165	
Phe	Thr	Thr	Ser	Leu	Arg	Ser	Trp	Met	Pro	Val	Val	Val	Val	Val	170	175	180	
Ser	Phe	Ile	Leu	Asp	Ile	Val	Leu	Leu	Phe	Gln	Glu	His	Gln	Phe	185	190	195	
Glu	Ala	Leu	Gly	Leu	Leu	Ile	Leu	Leu	Arg	Leu	Trp	Arg	Val	Ala	200	205	210	
Arg	Ile	Ile	Asn	Gly	Ile	Ile	Ile	Ser	Val	Lys	Thr	Arg	Ser	Glu	215	220	225	
Arg	Gln	Leu	Leu	Arg	Leu	Lys	Gln	Met	Asn	Val	Gln	Leu	Ala	Ala	230	235	240	
Lys	Ile	Gln	His	Leu	Glu	Phe	Ser	Cys	Ser	Glu	Lys	Pro	Leu	Asp	245	250	255	

<210> 217

<211> 1658

<212> DNA

<213> Homo Sapien

<400> 217

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 atttcagga gacactccat cacagtcact actgtcgct cagctgggaa 200
 cattggggag gatggaatcc tgagctgcac ttttgaacct gacatcaaac 250
 tttctgatat cgtgatacaa tggctgaagg aaggtgtttt aggcttggtc 300
 catgagttca aagaaggcaa agatgagctg tcggagcagg atgaaatggt 350
 cagaggccgg acagcagtggt ttgctgatca agtgatagtt ggcaatgcct 400
 ctttgccggt gaaaaacgtg caactcacag atgctggcac ctacaaatgt 450
 tatatcatca cttctaaagg caaggggaat gctaaccttg agtataaaac 500
 tggagccttc agcatgccgg aagtgaatgt ggactataat gccagctcag 550
 agaccttgcg gtgtgagggt ccccgatggg tccccagcc cacagtgggtc 600
 tgggcatccc aagttgacca gggagccaac ttctcggaag tctccaatac 650
 cagctttgag ctgaactctg agaatgtgac catgaagggt gtgtctgtgc 700
 tctacaatgt tacgatcaac aacacatact cctgtatgat tgaaaatgac 750
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 gcatccccag atctcaggga cctccccctg cctgtcacct ggggagttag 1250
 aggacaggat agtgcagtgt ctttgtctct gaatttttag ttatatgtgc 1300
 tgtaatgttg ctctgaggaa gccctggaa agtctatccc aacatatcca 1350
 catcttatat tccacaaatt aagctgtagt atgtacccta agacgctgct 1400
 aattgactgc cacttcgcaa ctcaggggag gctgcatttt agtaatgggt 1450
 caaatgattc actttttatg atgcttccaa aggtgccttg gcttctcttc 1500

ccaactgaca aatgccaaag ttgagaaaaa tgatcataat tttagcataa 1550
acagagcagt cggggacacc gattttataa ataaactgag caccttcttt 1600
ttaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
aaaaaaaa 1658

<210> 218
<211> 282
<212> PRT
<213> Homo Sapien

<400> 218
Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile
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Ile Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly
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Ile Ser Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala
35 40 45
Gly Asn Ile Gly Glu Asp Gly Ile Leu Ser Cys Thr Phe Glu Pro
50 55 60
Asp Ile Lys Leu Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly
65 70 75
Val Leu Gly Leu Val His Glu Phe Lys Glu Gly Lys Asp Glu Leu
80 85 90
Ser Glu Gln Asp Glu Met Phe Arg Gly Arg Thr Ala Val Phe Ala
95 100 105
Asp Gln Val Ile Val Gly Asn Ala Ser Leu Arg Leu Lys Asn Val
110 115 120
Gln Leu Thr Asp Ala Gly Thr Tyr Lys Cys Tyr Ile Ile Thr Ser
125 130 135
Lys Gly Lys Gly Asn Ala Asn Leu Glu Tyr Lys Thr Gly Ala Phe
140 145 150
Ser Met Pro Glu Val Asn Val Asp Tyr Asn Ala Ser Ser Glu Thr
155 160 165
Leu Arg Cys Glu Ala Pro Arg Trp Phe Pro Gln Pro Thr Val Val
170 175 180
Trp Ala Ser Gln Val Asp Gln Gly Ala Asn Phe Ser Glu Val Ser
185 190 195
Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val Thr Met Lys Val
200 205 210
Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr Tyr Ser Cys
215 220 225

Met	Ile	Glu	Asn	Asp	Ile	Ala	Lys	Ala	Thr	Gly	Asp	Ile	Lys	Val
				230					235					240
Thr	Glu	Ser	Glu	Ile	Lys	Arg	Arg	Ser	His	Leu	Gln	Leu	Leu	Asn
				245					250					255
Ser	Lys	Ala	Ser	Leu	Cys	Val	Ser	Ser	Phe	Phe	Ala	Ile	Ser	Trp
				260					265					270
Ala	Leu	Leu	Pro	Leu	Ser	Pro	Tyr	Leu	Met	Leu	Lys			
				275					280					

<210> 219
 <211> 1484
 <212> DNA
 <213> Homo Sapien

<400> 219
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 tgaagcgggc ctccgccggc ctgcagcggg ttcatgagcc gacctgggccc 150
 cagcagttgc tacaggagat gaagaccctc ttcttgaata ctgagtacct 200
 gatgcccttt ctectcaacc agtgtggatc ccttctctat tacctcacct 250
 tggcatcgac agatctgacc ctggctgtgc ccatctgtaa ctctctggct 300
 atcatcttca cactgattgt tgggaaggcc cttggagaag atattggtgg 350
 aaaacgtaag ttagactact gcgagtgcgg gacgcagctc tgtggatctc 400
 gacataacctg tgtagttcc ttcccagaac ccatctcccc agagtgggtg 450
 aggacacggc cttttcccat cctgcccttt cctctgcagc tgttttgctt 500
 ccttgtagggc atcagagttc ccttcccctg gacagtctgg agaaagacag 550
 aggctgggggt ttgggattga agaccagacc ccatctgagc ccttcctcca 600
 gccctgtacc agctcctact ggcattggctg agctcagacc ctctgattt 650
 ctgcctatta tcccaggagc agttgctggc atggtgctca ccgtgatagg 700
 aatttcactc tgcatacaaa gctcagtgag taagaccagc gggcaacagt 750
 ctaccctttg agtggggcga acccacttcc agctctgctg cctccaggaa 800
 gccctggggc catgaagtgc tggcagtgag cggatggacc tagcacttcc 850
 cctctctggc cttagcttcc tctctcttta tggggataac agctacctca 900
 tggatcaciaa taagagaaca agagtgaag agttttgtaa ccttcaagtg 950
 ctgttcagct gcggggattt agcacaggag actctacgct caccctcagc 1000

aaccctttctg ccccgagcgc tctcttcctg ctaacatctc aggctcccag 1050
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catggactgc agaactccag ctgcatggaa agggccagct gcagactttg 1150
agccagaaat gcaaacggga ggcctctggg actcagtcag agcgctttgg 1200
ctgaatgagg ggtggaaccg agggaagaag gtgcgtcgga gtggcagatg 1250
caggaaatga gctgtctatt agccttgccct gccccaccca tgaggtaggc 1300
agaaatcctc actgccagcc cctcttaaac aggtagagag ctgtgagccc 1350
cagccccacc tgactccagc acacctggcg agtagtagct gtcaataaat 1400
ctatgtaaac agacaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1450
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1484

<210> 220
<211> 180
<212> PRT
<213> Homo Sapien

<400> 220
Met Ala Ala Ser Leu Gly Gln Val Leu Ala Leu Val Leu Val Ala
1 5 10 15
Ala Leu Trp Gly Gly Thr Gln Pro Leu Leu Lys Arg Ala Ser Ala
20 25 30
Gly Leu Gln Arg Val His Glu Pro Thr Trp Ala Gln Gln Leu Leu
35 40 45
Gln Glu Met Lys Thr Leu Phe Leu Asn Thr Glu Tyr Leu Met Pro
50 55 60
Phe Leu Leu Asn Gln Cys Gly Ser Leu Leu Tyr Tyr Leu Thr Leu
65 70 75
Ala Ser Thr Asp Leu Thr Leu Ala Val Pro Ile Cys Asn Ser Leu
80 85 90
Ala Ile Ile Phe Thr Leu Ile Val Gly Lys Ala Leu Gly Glu Asp
95 100 105
Ile Gly Gly Lys Arg Lys Leu Asp Tyr Cys Glu Cys Gly Thr Gln
110 115 120
Leu Cys Gly Ser Arg His Thr Cys Val Ser Ser Phe Pro Glu Pro
125 130 135
Ile Ser Pro Glu Trp Val Arg Thr Arg Pro Phe Pro Ile Leu Pro
140 145 150
Phe Pro Leu Gln Leu Phe Cys Phe Leu Val Ala Ile Arg Val Pro
155 160 165

Phe Pro Trp Thr Val Trp Arg Lys Thr Glu Ala Gly Val Trp Asp
 170 175 180

<210> 221
 <211> 1164
 <212> DNA
 <213> Homo Sapien

<400> 221
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 gctttctctg tggaagatga cagcaattat agcaggaccc tgccaggctg 100
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 cggcctaaga tgccacttct tctcatgtcc caggcttgag gccctgtggt 200
 ccccatcctt gggagaagtc agctccagca ccatgaaggg catcctcggt 250
 gctggtatca ctgcagtgtc tgttgagctc gtagaatctc tgagctgcgt 300
 gcagtgtaat tcatgggaaa aatcctgtgt caacagcatt gcctctgaat 350
 gtccctcaca tgccaacacc agctgtatca gtcctcagc cagctcctct 400
 ctagagacac cagtcagatt ataccagaat atgttctgct cagcggagaa 450
 ctgcagtgtg gagacacaca ttacagcctt cactgtccac gtgtctgtg 500
 aagaacactt tcattttgta agccagtgtc gccaaggaaa ggaatgcagc 550
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 aagaatgaca ttgagtctaa gagtctcgtg ctgaaaggct gttccaacgt 750
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 gagtcatctt tcgaaagttt gagtgtgcaa atgtaaacag ctttaacccc 850
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 ctgcccagta agtgggagtc acaggtctcc aggcaatgcc gacagctgcc 1100
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 aaaaaaaaaa aaaa 1164

<210> 222

<211> 237
 <212> PRT
 <213> Homo Sapien

<400> 222

Met	Lys	Gly	Ile	Leu	Val	Ala	Gly	Ile	Thr	Ala	Val	Leu	Val	Ala	
1				5					10					15	
Ala	Val	Glu	Ser	Leu	Ser	Cys	Val	Gln	Cys	Asn	Ser	Trp	Glu	Lys	
				20					25					30	
Ser	Cys	Val	Asn	Ser	Ile	Ala	Ser	Glu	Cys	Pro	Ser	His	Ala	Asn	
				35					40					45	
Thr	Ser	Cys	Ile	Ser	Ser	Ser	Ala	Ser	Ser	Ser	Leu	Glu	Thr	Pro	
				50					55					60	
Val	Arg	Leu	Tyr	Gln	Asn	Met	Phe	Cys	Ser	Ala	Glu	Asn	Cys	Ser	
				65					70					75	
Glu	Glu	Thr	His	Ile	Thr	Ala	Phe	Thr	Val	His	Val	Ser	Ala	Glu	
				80					85					90	
Glu	His	Phe	His	Phe	Val	Ser	Gln	Cys	Cys	Gln	Gly	Lys	Glu	Cys	
				95					100					105	
Ser	Asn	Thr	Ser	Asp	Ala	Leu	Asp	Pro	Pro	Leu	Lys	Asn	Val	Ser	
				110					115					120	
Ser	Asn	Ala	Glu	Cys	Pro	Ala	Cys	Tyr	Glu	Ser	Asn	Gly	Thr	Ser	
				125					130					135	
Cys	Arg	Gly	Lys	Pro	Trp	Lys	Cys	Tyr	Glu	Glu	Glu	Gln	Cys	Val	
				140					145					150	
Phe	Leu	Val	Ala	Glu	Leu	Lys	Asn	Asp	Ile	Glu	Ser	Lys	Ser	Leu	
				155					160					165	
Val	Leu	Lys	Gly	Cys	Ser	Asn	Val	Ser	Asn	Ala	Thr	Cys	Gln	Phe	
				170					175					180	
Leu	Ser	Gly	Glu	Asn	Lys	Thr	Leu	Gly	Gly	Val	Ile	Phe	Arg	Lys	
				185					190					195	
Phe	Glu	Cys	Ala	Asn	Val	Asn	Ser	Leu	Thr	Pro	Thr	Ser	Ala	Pro	
				200					205					210	
Thr	Thr	Ser	His	Asn	Val	Gly	Ser	Lys	Ala	Ser	Leu	Tyr	Leu	Leu	
				215					220					225	
Ala	Leu	Ala	Ser	Leu	Leu	Leu	Arg	Gly	Leu	Leu	Pro				
				230					235						

<210> 223
 <211> 1245
 <212> DNA
 <213> Homo Sapien

<400> 223
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 aggtaggagg cagggcttgc ctactggcc accctcccaa cccaagagc 100
 ccagcccat ggtccccgcc gccggcgcg tgctgtgggt cctgctgctg 150
 aatctgggtc cccggggcgc gggggcccaa ggctgaccc agactccgac 200
 cgaaatgcag cgggtcagtt tacgctttgg gggcccatg acccgagct 250
 accggagcac cgcccgact ggtcttcccc ggaagacaag gataatccta 300
 gaggacgaga atgatgccat ggccgacgcc gaccgcctgg ctggaccagc 350
 ggctgccgag ctcttgcccg ccacgggtgc caccggcttt agccggtcgt 400
 ccgccattaa cgaggaggat gggctttcag aagagggggg tgtgattaat 450
 gccggaaagg atagcaccag cagagagctt cccagtgcga ctccaatac 500
 agcggggagt tccagcacga ggtttatagc caatagtcag gagcctgaaa 550
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 ctgccaggct cgcaggccac cctgagccag tggccacac ctgggtctac 650
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 gcgccttcga gttggggcgc tgagccagct ccgcacggag cacaagcctt 850
 gcacctatca acaatgtccc tgcaaccgac ttcgggaaga gtgccccctg 900
 gacacaagtc tctgtactga caccaactgt gcctctcaga gcaccaccag 950
 taccaggacc accactaccc cttccccac catccacctc agaagcagtc 1000
 ccagcctgcc acccgccagc ccctgccag ccctggcttt ttggaaacgg 1050
 gtcaggattg gcctggagga tatttgaat agcctctctt cagtgttcac 1100
 agagatgcaa ccaatagaca gaaaccagag gtaatggcca cttcatccac 1150
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 ccactagata ttttttagtac agaaaaacaa aactggaaaa cacia 1245

<210> 224
 <211> 341
 <212> PRT
 <213> Homo Sapien

<400> 224
 Met Val Pro Ala Ala Gly Ala Leu Leu Trp Val Leu Leu Leu Asn

1	5	10	15
Leu Gly Pro Arg	Ala Ala Gly Ala Gln Gly Leu Thr Gln Thr Pro	20	25 30
Thr Glu Met Gln Arg Val Ser Leu Arg Phe Gly Gly Pro Met Thr	35	40	45
Arg Ser Tyr Arg Ser Thr Ala Arg Thr Gly Leu Pro Arg Lys Thr	50	55	60
Arg Ile Ile Leu Glu Asp Glu Asn Asp Ala Met Ala Asp Ala Asp	65	70	75
Arg Leu Ala Gly Pro Ala Ala Ala Glu Leu Leu Ala Ala Thr Val	80	85	90
Ser Thr Gly Phe Ser Arg Ser Ser Ala Ile Asn Glu Glu Asp Gly	95	100	105
Ser Ser Glu Glu Gly Val Val Ile Asn Ala Gly Lys Asp Ser Thr	110	115	120
Ser Arg Glu Leu Pro Ser Ala Thr Pro Asn Thr Ala Gly Ser Ser	125	130	135
Ser Thr Arg Phe Ile Ala Asn Ser Gln Glu Pro Glu Ile Arg Leu	140	145	150
Thr Ser Ser Leu Pro Arg Ser Pro Gly Arg Ser Thr Glu Asp Leu	155	160	165
Pro Gly Ser Gln Ala Thr Leu Ser Gln Trp Ser Thr Pro Gly Ser	170	175	180
Thr Pro Ser Arg Trp Pro Ser Pro Ser Pro Thr Ala Met Pro Ser	185	190	195
Pro Glu Asp Leu Arg Leu Val Leu Met Pro Trp Gly Pro Trp His	200	205	210
Cys His Cys Lys Ser Gly Thr Met Ser Arg Ser Arg Ser Gly Lys	215	220	225
Leu His Gly Leu Ser Gly Arg Leu Arg Val Gly Ala Leu Ser Gln	230	235	240
Leu Arg Thr Glu His Lys Pro Cys Thr Tyr Gln Gln Cys Pro Cys	245	250	255
Asn Arg Leu Arg Glu Glu Cys Pro Leu Asp Thr Ser Leu Cys Thr	260	265	270
Asp Thr Asn Cys Ala Ser Gln Ser Thr Thr Ser Thr Arg Thr Thr	275	280	285
Thr Thr Pro Phe Pro Thr Ile His Leu Arg Ser Ser Pro Ser Leu	290	295	300

Pro	Pro	Ala	Ser	Pro	Cys	Pro	Ala	Leu	Ala	Phe	Trp	Lys	Arg	Val
				305					310					315
Arg	Ile	Gly	Leu	Glu	Asp	Ile	Trp	Asn	Ser	Leu	Ser	Ser	Val	Phe
				320					325					330
Thr	Glu	Met	Gln	Pro	Ile	Asp	Arg	Asn	Gln	Arg				
				335					340					

<210> 225
 <211> 2692
 <212> DNA
 <213> Homo Sapien

<400> 225
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 cggttggtcc tgctagctgg ggcagcggcg ctggcgagcg gctcccaggg 100
 cgaccgtgag ccggtgtacc gcgactgcgt actgcagtgc gaagagcaga 150
 actgctctgg gggcgctctg aatcacttcc gctcccgccca gccaatctac 200
 atgagtctag caggctggac ctgtcgggac gactgtaagt atgagtgtat 250
 gtgggtcacc gttgggctct acctccagga aggtcacaaa gtgcctcagt 300
 tccatggcaa gtggcccttc tcccggttcc tgttctttca agagccggca 350
 tcggccgtgg cctcgtttct caatggcctg gccagcctgg tgatgctctg 400
 ccgctaccgc accttcgtgc cagcctcctc ccccatgtac cacacctgtg 450
 tggccttcgc ctgggtgtcc ctcaatgcat ggttctggtc cacagtcttc 500
 cacaccaggg aactgacct cacagagaaa atggactact tctgtgcctc 550
 cactgtcatc ctacaactcaa tctacctgtg ctgcgtcagg accgtggggc 600
 tgcagcacc agctgtggtc agtgccttcc gggctctcct gctgctcatg 650
 ctgaccgtgc acgtctccta cctgagcctc atccgcttcg actatggcta 700
 caacctggtg gccaacgtgg ctattggcct ggtcaacgtg gtgtggtggc 750
 tggcctgggtg cctgtggaac cagcggcggc tgcctcacgt gcgcaagtgc 800
 gtggtggtgg tcttgetgct gcaggggctg tcctgctcg agctgcttga 850
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 gcaccatccc tgtccacgtc ctctttttca gctttctgga agatgacagc 950
 ctgtacctgc tgaaggaatc agaggacaag ttcaagctgg actgaagacc 1000
 ttggagcgag tctgccccag tggggatcct gccccgccc tgetggcctc 1050
 ccttctcccc tcaacccttg agatgatttt ctcttttcaa cttcttgaac 1100

ttggacatga aggatgtggg cccagaatca tgtggccagc ccacccctg 1150
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<210> 226
<211> 320
<212> PRT
<213> Homo Sapien

<400> 226
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Asp Cys Val Leu Gln Cys Glu Glu Gln Asn Cys Ser Gly Gly Ala
35 40 45
Leu Asn His Phe Arg Ser Arg Gln Pro Ile Tyr Met Ser Leu Ala
50 55 60
Gly Trp Thr Cys Arg Asp Asp Cys Lys Tyr Glu Cys Met Trp Val
65 70 75
Thr Val Gly Leu Tyr Leu Gln Glu Gly His Lys Val Pro Gln Phe
80 85 90
His Gly Lys Trp Pro Phe Ser Arg Phe Leu Phe Phe Gln Glu Pro
95 100 105
Ala Ser Ala Val Ala Ser Phe Leu Asn Gly Leu Ala Ser Leu Val
110 115 120
Met Leu Cys Arg Tyr Arg Thr Phe Val Pro Ala Ser Ser Pro Met
125 130 135
Tyr His Thr Cys Val Ala Phe Ala Trp Val Ser Leu Asn Ala Trp
140 145 150
Phe Trp Ser Thr Val Phe His Thr Arg Asp Thr Asp Leu Thr Glu
155 160 165
Lys Met Asp Tyr Phe Cys Ala Ser Thr Val Ile Leu His Ser Ile
170 175 180
Tyr Leu Cys Cys Val Arg Thr Val Gly Leu Gln His Pro Ala Val
185 190 195
Val Ser Ala Phe Arg Ala Leu Leu Leu Leu Met Leu Thr Val His
200 205 210
Val Ser Tyr Leu Ser Leu Ile Arg Phe Asp Tyr Gly Tyr Asn Leu
215 220 225
Val Ala Asn Val Ala Ile Gly Leu Val Asn Val Val Trp Trp Leu

230	235	240
Ala Trp Cys Leu Trp Asn Gln Arg Arg	Leu Pro His Val Arg Lys	
245	250	255
Cys Val Val Val Val Leu Leu Leu Gln	Gly Leu Ser Leu Leu Glu	
260	265	270
Leu Leu Asp Phe Pro Pro Leu Phe Trp	Val Leu Asp Ala His Ala	
275	280	285
Ile Trp His Ile Ser Thr Ile Pro Val	His Val Leu Phe Phe Ser	
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305	310	315
Lys Phe Lys Leu Asp		
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<210> 227
 <211> 2136
 <212> DNA
 <213> Homo Sapien

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<210> 228
 <211> 247
 <212> PRT
 <213> Homo Sapien

<400> 228

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				20					25					30

Arg	Val	Ile	Ile	Leu	Val	Ala	Gly	Ala	Phe	Phe	Trp	Leu	Val	Ser
				35					40					45

Leu	Leu	Leu	Ala	Ser	Val	Val	Trp	Phe	Ile	Leu	Val	His	Val	Thr
				50					55					60

Asp	Arg	Ser	Asp	Ala	Arg	Leu	Gln	Tyr	Gly	Leu	Leu	Ile	Phe	Gly
				65					70					75

Ala	Ala	Val	Ser	Val	Leu	Leu	Gln	Glu	Val	Phe	Arg	Phe	Ala	Tyr
				80					85					90

Tyr	Lys	Leu	Leu	Lys	Lys	Ala	Asp	Glu	Gly	Leu	Ala	Ser	Leu	Ser
				95					100					105

Glu	Asp	Gly	Arg	Ser	Pro	Ile	Ser	Ile	Arg	Gln	Met	Ala	Tyr	Val
				110					115					120

Ser	Gly	Leu	Ser	Phe	Gly	Ile	Ile	Ser	Gly	Val	Phe	Ser	Val	Ile
				125					130					135

Asn	Ile	Leu	Ala	Asp	Ala	Leu	Gly	Pro	Gly	Val	Val	Gly	Ile	His
				140					145					150

Gly	Asp	Ser	Pro	Tyr	Tyr	Phe	Leu	Thr	Ser	Ala	Phe	Leu	Thr	Ala
				155					160					165

Ala	Ile	Ile	Leu	Leu	His	Thr	Phe	Trp	Gly	Val	Val	Phe	Phe	Asp
				170					175					180

Ala	Cys	Glu	Arg	Arg	Arg	Tyr	Trp	Ala	Leu	Gly	Leu	Val	Val	Gly
				185					190					195

Ser	His	Leu	Leu	Thr	Ser	Gly	Leu	Thr	Phe	Leu	Asn	Pro	Trp	Tyr
				200					205					210

Glu	Ala	Ser	Leu	Leu	Pro	Ile	Tyr	Ala	Val	Thr	Val	Ser	Met	Gly
				215					220					225

Leu	Trp	Ala	Phe	Ile	Thr	Ala	Gly	Gly	Ser	Leu	Arg	Ser	Ile	Gln
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Arg	Ser	Leu	Leu	Cys	Lys	Asp
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<210> 229

<211> 1661

<212> DNA

<213> Homo Sapien

<220>

<221> unsure
 <222> 678
 <223> unknown base

<400> 229

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cacatggaaa a 1661

<210> 230

<211> 487

<212> PRT

<213> Homo Sapien

<220>

<221> unsure

<222> 196, 386

<223> unknown amino acid

<400> 230

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Tyr	Leu	Arg	Arg	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Arg
				20					25					30
Gln	Pro	Val	Thr	Arg	Ala	Glu	Thr	Thr	Pro	Gly	Ala	Pro	Arg	Ala
				35					40					45
Leu	Ser	Thr	Leu	Gly	Ser	Pro	Ser	Leu	Phe	Thr	Thr	Pro	Gly	Val
				50					55					60
Pro	Ser	Ala	Leu	Thr	Thr	Pro	Gly	Leu	Thr	Thr	Pro	Gly	Thr	Pro
				65					70					75
Lys	Thr	Leu	Asp	Leu	Arg	Gly	Arg	Ala	Gln	Ala	Leu	Met	Arg	Ser
				80					85					90
Phe	Pro	Leu	Val	Asp	Gly	His	Asn	Asp	Leu	Pro	Gln	Val	Leu	Arg
				95					100					105
Gln	Arg	Tyr	Lys	Asn	Val	Leu	Gln	Asp	Val	Asn	Leu	Arg	Asn	Phe
				110					115					120
Ser	His	Gly	Gln	Thr	Ser	Leu	Asp	Arg	Leu	Arg	Asp	Gly	Leu	Val
				125					130					135
Gly	Ala	Gln	Phe	Trp	Ser	Ala	Ser	Val	Ser	Cys	Gln	Ser	Gln	Asp
				140					145					150
Gln	Thr	Ala	Val	Arg	Leu	Ala	Leu	Glu	Gln	Ile	Asp	Leu	Ile	His
				155					160					165

Arg	Met	Cys	Ala	Ser	Tyr	Ser	Glu	Leu	Glu	Leu	Val	Thr	Ser	Ala	
				170					175					180	
Glu	Gly	Leu	Asn	Ser	Ser	Gln	Lys	Leu	Ala	Cys	Leu	Ile	Gly	Val	
				185					190					195	
Xaa	Gly	Gly	His	Ser	Leu	Asp	Ser	Ser	Leu	Ser	Val	Leu	Arg	Ser	
				200					205					210	
Phe	Tyr	Val	Leu	Gly	Val	Arg	Tyr	Leu	Thr	Leu	Thr	Phe	Thr	Cys	
				215					220					225	
Ser	Thr	Pro	Trp	Ala	Glu	Ser	Ser	Thr	Lys	Phe	Arg	His	His	Met	
				230					235					240	
Tyr	Thr	Asn	Val	Ser	Gly	Leu	Thr	Ser	Phe	Gly	Glu	Lys	Val	Val	
				245					250					255	
Glu	Glu	Leu	Asn	Arg	Leu	Gly	Met	Met	Ile	Asp	Leu	Ser	Tyr	Ala	
				260					265					270	
Ser	Asp	Thr	Leu	Ile	Arg	Arg	Val	Leu	Glu	Val	Ser	Gln	Ala	Pro	
				275					280					285	
Val	Ile	Phe	Ser	His	Ser	Ala	Ala	Arg	Ala	Val	Cys	Asp	Asn	Leu	
				290					295					300	
Leu	Asn	Val	Pro	Asp	Asp	Ile	Leu	Gln	Leu	Leu	Lys	Asn	Gly	Gly	
				305					310					315	
Ile	Val	Met	Val	Thr	Leu	Ser	Met	Gly	Val	Leu	Gln	Cys	Asn	Leu	
				320					325					330	
Leu	Ala	Asn	Val	Ser	Thr	Val	Ala	Asp	His	Phe	Asp	His	Ile	Arg	
				335					340					345	
Ala	Val	Ile	Gly	Ser	Glu	Phe	Ile	Gly	Ile	Gly	Gly	Asn	Tyr	Asp	
				350					355					360	
Gly	Thr	Gly	Arg	Phe	Pro	Gln	Gly	Leu	Glu	Asp	Val	Ser	Thr	Tyr	
				365					370					375	
Pro	Val	Leu	Ile	Glu	Glu	Leu	Leu	Ser	Arg	Xaa	Trp	Ser	Glu	Glu	
				380					385					390	
Glu	Leu	Gln	Gly	Val	Leu	Arg	Gly	Asn	Leu	Leu	Arg	Val	Phe	Arg	
				395					400					405	
Gln	Val	Glu	Lys	Val	Arg	Glu	Glu	Ser	Arg	Ala	Gln	Ser	Pro	Val	
				410					415					420	
Glu	Ala	Glu	Phe	Pro	Tyr	Gly	Gln	Leu	Ser	Thr	Ser	Cys	His	Ser	
				425					430					435	
His	Leu	Val	Pro	Gln	Asn	Gly	His	Gln	Ala	Thr	His	Leu	Glu	Val	
				440					445					450	
Thr	Lys	Gln	Pro	Thr	Asn	Arg	Val	Pro	Trp	Arg	Ser	Ser	Asn	Ala	

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Ser Pro Tyr Leu Val Pro Gly Leu Val Ala Ala Ala Thr Ile Pro			
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 <212> DNA
 <213> Homo Sapien

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<210> 232
 <211> 153
 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Lys Arg Pro Pro Glu Pro Thr Thr Pro Trp Gln Glu Asp Pro Glu
 50 55 60
 Pro Glu Asp Glu Asn Leu Tyr Glu Lys Asn Pro Asp Ser His Gly
 65 70 75
 Tyr Asp Lys Asp Pro Val Leu Asp Val Trp Asn Met Arg Leu Val
 80 85 90
 Phe Phe Phe Gly Val Ser Ile Ile Leu Val Leu Gly Ser Thr Phe
 95 100 105
 Val Ala Tyr Leu Pro Asp Tyr Arg Met Lys Glu Trp Ser Arg Arg
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 140 145 150
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<210> 233
 <211> 2162
 <212> DNA
 <213> Homo Sapien

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 atcacctcca agggcaagga gaacaaacca agttacatcc actaccagcc 1250
 tgcccaggac cggctgcaac cccacctcct ggagatgctg attcagctgc 1300
 cggccaactc agtcaccaag gtttccatcc agtttgagcg ggcgctgctg 1350
 aagtggaccg agtacacgcc agatcctaac catggcttct atgtcagccc 1400
 atctgtcctc agcgcccttg tgcccagcat ggtagcagcc aagccagtgg 1450
 actgggaaga gagtccctc ttcaacagcc tgttcccagt ctctgatggc 1500
 tctaactact ttgtgcccgt ctacacggag ccgctgctgg tgaacctgcc 1550
 gacaccggac ttcagcatgc cctacaacgt gatctgcctc acgtgactg 1600
 tgggtggcgt gtgctacggc tccttctaca atctcctcac ccgaaccttc 1650
 cacatcgagg agccccgcac aggtggcctg gccaaagcggc tggccaacct 1700
 tatccggcgc gcccgaggtg tccccccact ctgattcttg ccctttccag 1750
 cagctgcagc tgccgtttct ctctggggag gggagcccaa gggctgttcc 1800

tgccacttgc tctcctcaga gttggctttt gaaccaaagt gccctggacc 1850
 aggtcagggc ctacagctgt gttgtccagt acaggagcca cgagccaaat 1900
 gtggcatttg aatttgaatt aacttagaaa ttcatttcct cacctgtagt 1950
 ggccacctct atattgaggt gctcaataag caaaagtggc cggcggctgc 2000
 tgtattggac agcacagaaa aagatttcca tcaccacaga aaggcggct 2050
 ggagcactg gcccaaggtga tgggggtgtgc tacacagtgt atgtcactgt 2100
 gtagtggatg gagtttactg tttgtggaat aaaaacggct gtttccgtgg 2150
 aaaaaaaaaa aa 2162

<210> 234
 <211> 574
 <212> PRT
 <213> Homo Sapien

<400> 234
 Met Pro Leu Ala Leu Leu Val Leu Leu Leu Leu Gly Pro Gly Gly
 1 5 10 15
 Trp Cys Leu Ala Glu Pro Pro Arg Asp Ser Leu Arg Glu Glu Leu
 20 25 30
 Val Ile Thr Pro Leu Pro Ser Gly Asp Val Ala Ala Thr Phe Gln
 35 40 45
 Phe Arg Thr Arg Trp Asp Ser Glu Leu Gln Arg Glu Gly Val Ser
 50 55 60
 His Tyr Arg Leu Phe Pro Lys Ala Leu Gly Gln Leu Ile Ser Lys
 65 70 75
 Tyr Ser Leu Arg Glu Leu His Leu Ser Phe Thr Gln Gly Phe Trp
 80 85 90
 Arg Thr Arg Tyr Trp Gly Pro Pro Phe Leu Gln Ala Pro Ser Gly
 95 100 105
 Ala Glu Leu Trp Val Trp Phe Gln Asp Thr Val Thr Asp Val Asp
 110 115 120
 Lys Ser Trp Lys Glu Leu Ser Asn Val Leu Ser Gly Ile Phe Cys
 125 130 135
 Ala Ser Leu Asn Phe Ile Asp Ser Thr Asn Thr Val Thr Pro Thr
 140 145 150
 Ala Ser Phe Lys Pro Leu Gly Leu Ala Asn Asp Thr Asp His Tyr
 155 160 165
 Phe Leu Arg Tyr Ala Val Leu Pro Arg Glu Val Val Cys Thr Glu
 170 175 180

Asn	Leu	Thr	Pro	Trp	Lys	Lys	Leu	Leu	Pro	Cys	Ser	Ser	Lys	Ala	
				185					190					195	
Gly	Leu	Ser	Val	Leu	Leu	Lys	Ala	Asp	Arg	Leu	Phe	His	Thr	Ser	
				200					205					210	
Tyr	His	Ser	Gln	Ala	Val	His	Ile	Arg	Pro	Val	Cys	Arg	Asn	Ala	
				215					220					225	
Arg	Cys	Thr	Ser	Ile	Ser	Trp	Glu	Leu	Arg	Gln	Thr	Leu	Ser	Val	
				230					235					240	
Val	Phe	Asp	Ala	Phe	Ile	Thr	Gly	Gln	Gly	Lys	Lys	Asp	Trp	Ser	
				245					250					255	
Leu	Phe	Arg	Met	Phe	Ser	Arg	Thr	Leu	Thr	Glu	Pro	Cys	Pro	Leu	
				260					265					270	
Ala	Ser	Glu	Ser	Arg	Val	Tyr	Val	Asp	Ile	Thr	Thr	Tyr	Asn	Gln	
				275					280					285	
Asp	Asn	Glu	Thr	Leu	Glu	Val	His	Pro	Pro	Pro	Thr	Thr	Thr	Tyr	
				290					295					300	
Gln	Asp	Val	Ile	Leu	Gly	Thr	Arg	Lys	Thr	Tyr	Ala	Ile	Tyr	Asp	
				305					310					315	
Leu	Leu	Asp	Thr	Ala	Met	Ile	Asn	Asn	Ser	Arg	Asn	Leu	Asn	Ile	
				320					325					330	
Gln	Leu	Lys	Trp	Lys	Arg	Pro	Pro	Glu	Asn	Glu	Ala	Pro	Pro	Val	
				335					340					345	
Pro	Phe	Leu	His	Ala	Gln	Arg	Tyr	Val	Ser	Gly	Tyr	Gly	Leu	Gln	
				350					355					360	
Lys	Gly	Glu	Leu	Ser	Thr	Leu	Leu	Tyr	Asn	Thr	His	Pro	Tyr	Arg	
				365					370					375	
Ala	Phe	Pro	Val	Leu	Leu	Leu	Asp	Thr	Val	Pro	Trp	Tyr	Leu	Arg	
				380					385					390	
Leu	Tyr	Val	His	Thr	Leu	Thr	Ile	Thr	Ser	Lys	Gly	Lys	Glu	Asn	
				395					400					405	
Lys	Pro	Ser	Tyr	Ile	His	Tyr	Gln	Pro	Ala	Gln	Asp	Arg	Leu	Gln	
				410					415					420	
Pro	His	Leu	Leu	Glu	Met	Leu	Ile	Gln	Leu	Pro	Ala	Asn	Ser	Val	
				425					430					435	
Thr	Lys	Val	Ser	Ile	Gln	Phe	Glu	Arg	Ala	Leu	Leu	Lys	Trp	Thr	
				440					445					450	
Glu	Tyr	Thr	Pro	Asp	Pro	Asn	His	Gly	Phe	Tyr	Val	Ser	Pro	Ser	
				455					460					465	
Val	Leu	Ser	Ala	Leu	Val	Pro	Ser	Met	Val	Ala	Ala	Lys	Pro	Val	

470	475	480
Asp Trp Glu Glu Ser Pro Leu Phe Asn	Ser Leu Phe Pro Val Ser	
485	490	495
Asp Gly Ser Asn Tyr Phe Val Arg Leu	Tyr Thr Glu Pro Leu Leu	
500	505	510
Val Asn Leu Pro Thr Pro Asp Phe Ser	Met Pro Tyr Asn Val Ile	
515	520	525
Cys Leu Thr Cys Thr Val Val Ala Val	Cys Tyr Gly Ser Phe Tyr	
530	535	540
Asn Leu Leu Thr Arg Thr Phe His Ile	Glu Glu Pro Arg Thr Gly	
545	550	555
Gly Leu Ala Lys Arg Leu Ala Asn Leu	Ile Arg Arg Ala Arg Gly	
560	565	570
Val Pro Pro Leu		

<210> 235
 <211> 1617
 <212> DNA
 <213> Homo Sapien

<400> 235
 tgacgtcaga atcaccatgg ccagctatcc ttaccggcag ggctgcccag 50
 gagctgcagg acaagcacca ggagcccctc cgggtagcta ctaccctgga 100
 ccccccaata gtggagggca gtatggtagt gggctacccc ctggtggtgg 150
 ttatgggggt cctgcccctg gagggcctta tggaccacca gctggtggag 200
 ggccctatgg acaccccaat cctgggatgt tcccctctgg aactccagga 250
 ggaccatatg gcggtgcagc tcccgggggc ccctatggtc agccacctcc 300
 aagttcctac ggtgcccagc agcctgggct ttatggacag ggtggcgccc 350
 ctcccaatgt ggatcctgag gcctactcct ggttccagtc ggtggactca 400
 gatcacagtg gctatatctc catgaaggag ctaaagcagg ccctggtcaa 450
 ctgcaattgg tcttcattca atgatgagac ctgcctcatg atgataaaca 500
 tgtttgacaa gaccaagtca ggccgcatcg atgtctacgg cttctcagcc 550
 ctgtggaaat tcatccagca gtggaagaac ctcttcagc agtatgaccg 600
 ggaccgctcg ggctccatta gctacacaga gctgcagcaa gctctgtccc 650
 aaatgggcta caaactgagc cccagttca cccagcttct ggtctcccgc 700
 tactgcccac gctctgccaa tcctgccatg cagcttgacc gttcatcca 750

ggtgtgcacc cagctgcagg tgctgacaga ggccttccgg gagaaggaca 800
 cagctgtaca aggcaacatc cggctcagct tcgaggactt cgtcaccatg 850
 acagctttctc ggatgctatg acccaaccat ctgtggagag tggagtgcac 900
 cagggaacctt tcttggtctc ttagagttag agaagtatgt ggacatctct 950
 tcttttctctg tccctctaga agaacattct cccttgcttg atgcaacact 1000
 gttccaaaag aggggtggaga gtcttgcac atagccacca aatagttagg 1050
 accggggctg aggccacaca gatagggggc tgatggagga gaggatagaa 1100
 gttgaatgtc ctgatggcca tgagcagttg agtggcacag cctggcacca 1150
 ggagcaggtc cttgtaatgg agttagtgtc cagtcagctg agctccaccc 1200
 tgatgccagt ggtgagtgtt catcggcctg ttaccgtagg tacctgtgtt 1250
 ccctcaccag gccatcctgt caaacgagcc ctttttctcc aaagtggaa 1300
 ctgaccaagc atgagagaga tctgtctatg ggaccagtgg cttggattct 1350
 gccacaccca taaatccttg tgtgttaact tctagctgcc tggggctggc 1400
 cctgctcaga caaatctgct ccctgggcat ctttggccag gcttctgccc 1450
 cctgcagctg ggaccctca cttgcctgcc atgctctgct cggcttcagt 1500
 ctccaggaga cagtggtcac ctctccctgc caatactttt ttttaatttgc 1550
 attttttttc atttggggcc aaaagtccag tgaaattgta agcttcaata 1600
 aaaggatgaa actctga 1617

<210> 236
 <211> 284
 <212> PRT
 <213> Homo Sapien

<400> 236
 Met Ala Ser Tyr Pro Tyr Arg Gln Gly Cys Pro Gly Ala Ala Gly
 1 5 10 15
 Gln Ala Pro Gly Ala Pro Pro Gly Ser Tyr Tyr Pro Gly Pro Pro
 20 25 30
 Asn Ser Gly Gly Gln Tyr Gly Ser Gly Leu Pro Pro Gly Gly Gly
 35 40 45
 Tyr Gly Gly Pro Ala Pro Gly Gly Pro Tyr Gly Pro Pro Ala Gly
 50 55 60
 Gly Gly Pro Tyr Gly His Pro Asn Pro Gly Met Phe Pro Ser Gly
 65 70 75
 Thr Pro Gly Gly Pro Tyr Gly Gly Ala Ala Pro Gly Gly Pro Tyr

	80		85		90
Gly Gln Pro Pro	Pro Ser Ser Tyr Gly	Ala Gln Gln Pro Gly	Leu		
	95	100	105		
Tyr Gly Gln Gly	Gly Ala Pro Pro Asn	Val Asp Pro Glu Ala	Tyr		
	110	115	120		
Ser Trp Phe Gln	Ser Val Asp Ser Asp	His Ser Gly Tyr Ile	Ser		
	125	130	135		
Met Lys Glu Leu	Lys Gln Ala Leu Val	Asn Cys Asn Trp Ser	Ser		
	140	145	150		
Phe Asn Asp Glu	Thr Cys Leu Met Met	Ile Asn Met Phe Asp	Lys		
	155	160	165		
Thr Lys Ser Gly	Arg Ile Asp Val Tyr	Gly Phe Ser Ala Leu	Trp		
	170	175	180		
Lys Phe Ile Gln	Gln Trp Lys Asn Leu	Phe Gln Gln Tyr Asp	Arg		
	185	190	195		
Asp Arg Ser Gly	Ser Ile Ser Tyr Thr	Glu Leu Gln Gln Ala	Leu		
	200	205	210		
Ser Gln Met Gly	Tyr Asn Leu Ser Pro	Gln Phe Thr Gln Leu	Leu		
	215	220	225		
Val Ser Arg Tyr	Cys Pro Arg Ser Ala	Asn Pro Ala Met Gln	Leu		
	230	235	240		
Asp Arg Phe Ile	Gln Val Cys Thr Gln	Leu Gln Val Leu Thr	Glu		
	245	250	255		
Ala Phe Arg Glu	Lys Asp Thr Ala Val	Gln Gly Asn Ile Arg	Leu		
	260	265	270		
Ser Phe Glu Asp	Phe Val Thr Met Thr	Ala Ser Arg Met Leu			
	275	280			

<210> 237
 <211> 1234
 <212> DNA
 <213> Homo Sapien

<400> 237
 caggatgcag ggccgcgtgg caggagctg cgctcctctg ggccctgctcc 50
 tgggtctgtct tcattctccca ggctctcttg cccggagcat cgggtgttg 100
 gaggagaaag ttccccaaaa ctccgggacc aacttgccctc agctcggaca 150
 accttctctcc actggccct ctaactctga acatccgcag cccgctctgg 200
 accctaggtc taatgacttg gcaagggttc ctctgaagct cagcgtgcct 250
 ccatcagatg gcttccacc tgcaggaggt tctgcagtgc agaggtggcc 300

Pro	Leu	Lys	Leu	Ser	Val	Pro	Pro	Ser	Asp	Gly	Phe	Pro	Pro	Ala	
				80					85					90	
Gly	Gly	Ser	Ala	Val	Gln	Arg	Trp	Pro	Pro	Ser	Trp	Gly	Leu	Pro	
				95					100					105	
Ala	Met	Asp	Ser	Trp	Pro	Pro	Glu	Asp	Pro	Trp	Gln	Met	Met	Ala	
				110					115					120	
Ala	Ala	Ala	Glu	Asp	Arg	Leu	Gly	Glu	Ala	Leu	Pro	Glu	Glu	Leu	
				125					130					135	
Ser	Tyr	Leu	Ser	Ser	Ala	Ala	Ala	Leu	Ala	Pro	Gly	Ser	Gly	Pro	
				140					145					150	
Leu	Pro	Gly	Glu	Ser	Ser	Pro	Asp	Ala	Thr	Gly	Leu	Ser	Pro	Glu	
				155					160					165	
Ala	Ser	Leu	Leu	His	Gln	Asp	Ser	Glu	Ser	Arg	Arg	Leu	Pro	Arg	
				170					175					180	
Ser	Asn	Ser	Leu	Gly	Ala	Gly	Gly	Lys	Ile	Leu	Ser	Gln	Arg	Pro	
				185					190					195	
Pro	Trp	Ser	Leu	Ile	His	Arg	Val	Leu	Pro	Asp	His	Pro	Trp	Gly	
				200					205					210	
Thr	Leu	Asn	Pro	Ser	Val	Ser	Trp	Gly	Gly	Gly	Gly	Pro	Gly	Thr	
				215					220					225	
Gly	Trp	Gly	Thr	Arg	Pro	Met	Pro	His	Pro	Glu	Gly	Ile	Trp	Gly	
				230					235					240	
Ile	Asn	Asn	Gln	Pro	Pro	Gly	Thr	Ser	Trp	Gly	Asn	Ile	Asn	Arg	
				245					250					255	
Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	
				260					265					270	
Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	
				275					280					285	
Ile	His	Leu	Tyr	Pro	Gly	Ile	Asn	Asn	Pro	Phe	Pro	Pro	Gly	Val	
				290					295					300	
Leu	Arg	Pro	Pro	Gly	Ser	Ser	Trp	Asn	Ile	Pro	Ala	Gly	Phe	Pro	
				305					310					315	
Asn	Pro	Pro	Ser	Pro	Arg	Leu	Gln	Trp	Gly						
				320					325						

<210> 239

<211> 1738

<212> DNA

<213> Homo Sapien

<400> 239

gggcgtctcc ggctgctcct attgagctgt ctgctcgtctg tgcccgtctgt 50

gcctgctgtg cccgcgctgt cgccgctgct accgcgtctg ctggacgcgg 100
gagacgccag cgagctgggtg attggagccc tgaggagagc tcaagcggcc 150
agctctgccc caggagccca ggctgccccg tgagtcccat agttgctgca 200
ggagtggagc catgagctgc gtcctgggtg gtgtcatccc cttggggctg 250
ctgttcctgg tctgoggatc ccaaggctac ctctgcccc aagtcactct 300
cttagaggag ctgctcagca aataccagca caacgagtct cactcccggg 350
tccgcagagc catccccagg gaggacaagg aggagatcct catgctgcac 400
aacaagcttc ggggccagggt gcagcctcag gcctccaaca tggagtacat 450
ggtgagcgcc ggctccggcc gcagaggctg gcaccggggg tggggcctgg 500
gccaccagcc tgctctgttc ccagccagc tctgttcccc agccagtgcg 550
tgtgatggct ggctcagggt ctctctggc aggggaggat cccggctctg 600
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gttaagcgat cctgcttcag cctcccaagt agctggaact acaggcatgc 750
accatgggtgc ccagctagat tttaaatatt ttgtggagat gggggctctg 800
ctacgttgcc caggctggtc ttgaactcct aggetcaagc aatcctcctg 850
cctcagcctc tcaaagtgtc aggattatag gcatgagtca ccctgtctgg 900
ctctggctct gttcttaaca ttctgccaaa acaacacacg tgggttcct 950
gtgcagagcc tgctcgttg ccttcatgtc actcttggtg gctccactgg 1000
gaacacagct ctcagccttt ccacactgga ggcagagtgg ggagggggccc 1050
agggctgggc tttgctgatg ctgatctcag ctgtgccaca cgctagctgc 1100
accaccctga cttctcctta gcccggtgta gcctcacttt ccaactggag 1150
agtccttcct cgcgtgggtg ccatgactgt gagataagtc gaggctgtga 1200
aggggccggc acagactgac ctgcctcccc aaccctagg ctttgctaac 1250
cgggaaagga gctaacggtg acagaagaca gccaaagtca accctcccgg 1300
gtgattgtga tgggtgttcc aggtgtggtt gggcgatgct gctacttgac 1350
cccaagctcc agtgtggaaa cttccttcct ggctggtttt ccagaactac 1400
agaggaatgg accacagtct tccagggtcc ctctcgtcc accaaccggg 1450
agcctccacc ttggccatcc gtcagctatg aatggctttt taaacaaacc 1500

cacgtcccag cctgggtaac atggtaaagc cccgtctcta caaaaaaatc 1550
 caagttagcc gggcatggtg gtgcgcacct gtagtcccag ctgcagtggg 1600
 actgaggtgg aggtggaggt ggggggtggg agctgaggaa ggaggatcgc 1650
 ttgagcctgg gaagtcgagg ctgcagtgag ctgagattgc accactgcac 1700
 tccagcctgg gtgacagagc aagaccctgt ctcaaaaa 1738

<210> 240
 <211> 159
 <212> PRT
 <213> Homo Sapien

<400> 240
 Met Ser Cys Val Leu Gly Gly Val Ile Pro Leu Gly Leu Leu Phe
 1 5 10 15
 Leu Val Cys Gly Ser Gln Gly Tyr Leu Leu Pro Asn Val Thr Leu
 20 25 30
 Leu Glu Glu Leu Leu Ser Lys Tyr Gln His Asn Glu Ser His Ser
 35 40 45
 Arg Val Arg Arg Ala Ile Pro Arg Glu Asp Lys Glu Glu Ile Leu
 50 55 60
 Met Leu His Asn Lys Leu Arg Gly Gln Val Gln Pro Gln Ala Ser
 65 70 75
 Asn Met Glu Tyr Met Val Ser Ala Gly Ser Gly Arg Arg Gly Trp
 80 85 90
 His Arg Gly Trp Gly Leu Gly His Gln Pro Ala Leu Phe Pro Ser
 95 100 105
 Gln Leu Cys Ser Pro Ala Ser Ala Cys Asp Gly Trp Leu Arg Val
 110 115 120
 Ser Ser Gly Arg Gly Gly Ser Arg Leu Cys Ser Val Leu Phe Val
 125 130 135
 Cys Phe Glu Thr Gly Ser His Ser Ala Thr Asp Ala Gly Val Gln
 140 145 150
 Trp His Asn Arg His Ala Leu Lys Pro
 155

<210> 241
 <211> 422
 <212> DNA
 <213> Homo Sapien

<400> 241
 aaggagaggc caccgggact tcagtgtctc ctccatccca ggagcgcagt 50
 ggccactatg ggggtctgggc tgccccttgt cctcctcttg accctccttg 100

gcagctcaca tggaacaggg ccgggtatga ctttgcaact gaagctgaag 150
gagtcttttc tgacaaattc ctctatgag tccagcttcc tggaattgct 200
tgaaaagctc tgcctcctcc tccatctccc ttcagggacc agcgtcacc 250
tccaccatgc aagatctcaa caccatgttg tctgcaacac atgacagcca 300
ttgaagcctg tgtccttctt ggcccgggct tttgggccgg ggatgcagga 350
ggcaggcccc gaccctgtct ttcagcaggc cccaccctc ctgagtggca 400
ataaataaaa ttcggtatgc tg 422

<210> 242
<211> 78
<212> PRT
<213> Homo Sapien

<400> 242
Met Gly Ser Gly Leu Pro Leu Val Leu Leu Leu Thr Leu Leu Gly
1 5 10 15
Ser Ser His Gly Thr Gly Pro Gly Met Thr Leu Gln Leu Lys Leu
20 25 30
Lys Glu Ser Phe Leu Thr Asn Ser Ser Tyr Glu Ser Ser Phe Leu
35 40 45
Glu Leu Leu Glu Lys Leu Cys Leu Leu Leu His Leu Pro Ser Gly
50 55 60
Thr Ser Val Thr Leu His His Ala Arg Ser Gln His His Val Val
65 70 75
Cys Asn Thr

<210> 243
<211> 508
<212> DNA
<213> Homo Sapien

<400> 243
ggcaagtgga accactggct tgggtggattt tgctagattt ttctgatttt 50
taaactcctg aaaaatatcc cagataactg tcatgaagct ggtaactatc 100
ttcctgctgg tgaccatcag cttttgtagt tactctgcta ctgccttcct 150
catcaacaaa gtgccccctc ctgttgacaa gttggcacct ttacctctgg 200
acaacattct tccctttatg gatccattaa agcttcttct gaaaactctg 250
ggcatttctg ttgagcacct tgtggagggg ctaaggaagt gtgtaaata 300
gctgggacca gaggcttctg aagctgtgaa gaaactgctg gaggcgctat 350

cacacttggt gtgacatcaa gataaagagc ggaggtggat ggggatggaa 400
 gatgatgctc ctatcctccc tgcctgaaac ctgttctacc aattatagat 450
 caaatgccct aaaatgtagt gacccgtgaa aaggacaaat aaagcaatga 500
 atacatta 508

<210> 244
 <211> 93
 <212> PRT
 <213> Homo Sapien

<400> 244
 Met Lys Leu Val Thr Ile Phe Leu Leu Val Thr Ile Ser Leu Cys
 1 5 10 15
 Ser Tyr Ser Ala Thr Ala Phe Leu Ile Asn Lys Val Pro Leu Pro
 20 25 30
 Val Asp Lys Leu Ala Pro Leu Pro Leu Asp Asn Ile Leu Pro Phe
 35 40 45
 Met Asp Pro Leu Lys Leu Leu Leu Lys Thr Leu Gly Ile Ser Val
 50 55 60
 Glu His Leu Val Glu Gly Leu Arg Lys Cys Val Asn Glu Leu Gly
 65 70 75
 Pro Glu Ala Ser Glu Ala Val Lys Lys Leu Leu Glu Ala Leu Ser
 80 85 90
 His Leu Val

<210> 245
 <211> 1564
 <212> DNA
 <213> Homo Sapien

<400> 245
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 aacacccaca gatccctcta tgactgcaat gtgaggtgtc cggctttgct 100
 ggcccagcaa gcctgataag catgaagctc ttatctttgg tggctgtggt 150
 cgggtgtttg ctggtgcccc cagctgaagc caacaagagt tctgaagata 200
 tccggtgcaa atgcatctgt ccaccttata gaaacatcag tgggcacatt 250
 tacaaccaga atgtatccca gaaggactgc aactgcctgc acgtggtgga 300
 gcccatgcca gtgcctggcc atgacgtgga ggcctactgc ctgctgtgcg 350
 agtgcaggta cgaggagcgc agcaccacca ccatcaaggt catcattgtc 400
 atctacctgt ccgtggtggg tgcctgttg ctctacatgg ccttcctgat 450

gctggtggac cctctgatcc gaaagccgga tgcatacact gagcaactgc 500
 acaatgagga ggagaatgag gatgctcgct ctatggcagc agctgctgca 550
 tccctcgggg gaccccgagc aaacacagtc ctggagcgtg tggaaggtgc 600
 ccagcagcgg tggaagctgc aggtgcagga gcagcgggaag acagtcttcg 650
 atcggcacaa gatgctcagc tagatgggct ggtgtggttg ggtcaaggcc 700
 ccaacaccat ggctgccagc ttccaggctg gacaaagcag ggggctactt 750
 ctcccttccc tcggttccag tcttcccttt aaaagcctgt ggcatttttc 800
 ctcccttccc ctaactttag aaatgttgta cttggctatt ttgattaggg 850
 aagagggatg tgggtctctga tctctgttgt cttcttgggt ctttggggtt 900
 gaagggaggg ggaaggcagg ccagaaggga atggagacat tcgaggcggc 950
 ctcaggagtg gatgcgatct gtctctcctg gctccactct tgccgccttc 1000
 cagctctgag tcttgggaat gttgttacct ttggaagata aagctgggtc 1050
 ttcaggaaact cagtgtctgg gaggaagca tggccagca ttcagcatgt 1100
 gttcctttct gcagtgggtc ttatcaccac ctccctccca gccccggcgc 1150
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 cgctgtcccc tgtgcacttc tgcactggg gcatggagtg cccatgcata 1300
 ctctgctgcc ggtccctca cctgcaactg aggggtctgg gcagtcctc 1350
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 gcctcttgtc cctgaacttc gttgtaccag tgcattggaga gaaaattttg 1500
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<210> 246

<211> 183

<212> PRT

<213> Homo Sapien

<400> 246

Met	Lys	Leu	Leu	Ser	Leu	Val	Ala	Val	Val	Gly	Cys	Leu	Leu	Val
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Pro	Pro	Ala	Glu	Ala	Asn	Lys	Ser	Ser	Glu	Asp	Ile	Arg	Cys	Lys
				20					25					30

aatagaaacc tgtgttttatt ctcaggtatt ttagaaacaa cagccatcat 550
 tttattttat gtgtgtgttc ttggctgtat tcataaatta tatatttttg 600
 gctatcaaatt attacttcat tcaatataaa taacaatagt agaagttgtt 650
 tacttagata tgctttctag ttgcattttc tcagcctatg taagactact 700
 ttgttgtaat agcctttgaa atttacagta ctgtctctct actatcttca 750
 gattacttga ttcaaataaa ccaattatgt ttgtaattga tattaataaa 800
 accagaataa aagttcatat ctaccc 826

<210> 248
 <211> 67
 <212> PRT
 <213> Homo Sapien

<400> 248
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 Thr Val Phe Cys Val Leu Leu Ile Phe Thr Ile Ala Glu Ala Ser
 20 25 30
 Phe Ser Val Glu Asn Glu Cys Leu Val Asp Leu Cys Leu Leu Arg
 35 40 45
 Ile Cys Tyr Lys Leu Ser Gly Val Pro Asn Gln Cys Arg Val Pro
 50 55 60
 Leu Pro Ser Asp Cys Ser Lys
 65

<210> 249
 <211> 3170
 <212> DNA
 <213> Homo Sapien

<400> 249
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 tctgcaagcc cccgcgaccc aagtgagggg ccccggtgtg gggtcctccc 150
 tccctttgca tccccacccc tccgggcttt gcgtcttccg ggggaccccc 200
 tcgccgggag atggccgcgt tgatgcggag caaggattcg tctgctgcc 250
 tgctcctact ggccgcggtg ctgatggtgg agagctcaca gatcggcagt 300
 tcgcgggcca aactcaactc catcaagtcc tctctgggag gggagacgcc 350
 tggtcaggcc gccaatcgat ctgcgggcat gtaccaagga ctggcattcg 400
 gcggcagtaa gaagggcaaa aacctggggc aggcctaccc ttgtagcagt 450

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aaaaaaaaa aaaaaaaaaa 3170

<210> 250

<211> 259

<212> PRT

<213> Homo Sapien

<400> 250

Met	Ala	Ala	Leu	Met	Arg	Ser	Lys	Asp	Ser	Ser	Cys	Cys	Leu	Leu	1	5	10	15
Leu	Leu	Ala	Ala	Val	Leu	Met	Val	Glu	Ser	Ser	Gln	Ile	Gly	Ser	20	25	30	
Ser	Arg	Ala	Lys	Leu	Asn	Ser	Ile	Lys	Ser	Ser	Leu	Gly	Gly	Glu	35	40	45	
Thr	Pro	Gly	Gln	Ala	Ala	Asn	Arg	Ser	Ala	Gly	Met	Tyr	Gln	Gly	50	55	60	
Leu	Ala	Phe	Gly	Gly	Ser	Lys	Lys	Gly	Lys	Asn	Leu	Gly	Gln	Ala	65	70	75	
Tyr	Pro	Cys	Ser	Ser	Asp	Lys	Glu	Cys	Glu	Val	Gly	Arg	Tyr	Cys	80	85	90	
His	Ser	Pro	His	Gln	Gly	Ser	Ser	Ala	Cys	Met	Val	Cys	Arg	Arg	95	100	105	
Lys	Lys	Lys	Arg	Cys	His	Arg	Asp	Gly	Met	Cys	Cys	Pro	Ser	Thr	110	115	120	
Arg	Cys	Asn	Asn	Gly	Ile	Cys	Ile	Pro	Val	Thr	Glu	Ser	Ile	Leu	125	130	135	
Thr	Pro	His	Ile	Pro	Ala	Leu	Asp	Gly	Thr	Arg	His	Arg	Asp	Arg	140	145	150	
Asn	His	Gly	His	Tyr	Ser	Asn	His	Asp	Leu	Gly	Trp	Gln	Asn	Leu	155	160	165	
Gly	Arg	Pro	His	Thr	Lys	Met	Ser	His	Ile	Lys	Gly	His	Glu	Gly	170	175	180	
Asp	Pro	Cys	Leu	Arg	Ser	Ser	Asp	Cys	Ile	Glu	Gly	Phe	Cys	Cys	185	190	195	
Ala	Arg	His	Phe	Trp	Thr	Lys	Ile	Cys	Lys	Pro	Val	Leu	His	Gln	200	205	210	
Gly	Glu	Val	Cys	Thr	Lys	Gln	Arg	Lys	Lys	Gly	Ser	His	Gly	Leu	215	220	225	
Glu	Ile	Phe	Gln	Arg	Cys	Asp	Cys	Ala	Lys	Gly	Leu	Ser	Cys	Lys	230	235	240	
Val	Trp	Lys	Asp	Ala	Thr	Tyr	Ser	Ser	Lys	Ala	Arg	Leu	His	Val	245	250	255	

Cys Gln Lys Ile

<210> 251
 <211> 1809
 <212> DNA
 <213> Homo Sapien

<400> 251

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 aaaataacttg atgtgtttta aagccttggg cagaaattct gtattgttga 350
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 ctcaagcccc caacatccca gtctcagtc ctcagtcate ttgacttcaa 600
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 ctgaaaaga 1809

<210> 252
 <211> 363
 <212> PRT
 <213> Homo Sapien

<400> 252

Met	Cys	Phe	Lys	Ala	Leu	Gly	Arg	Asn	Ser	Val	Leu	Leu	Arg	Ile	1	5	10	15
Cys	Ser	Phe	Ile	Pro	Leu	Leu	Lys	Ser	Ser	Val	Leu	Gly	Ser	Gly	20	25	30	
Phe	Gly	Glu	Leu	Ala	Pro	Pro	Lys	Met	Ala	Asn	Ile	Thr	Ser	Ser	35	40	45	
Gln	Ile	Leu	Asp	Gln	Leu	Lys	Ala	Pro	Ser	Leu	Gly	Gln	Phe	Thr	50	55	60	
Thr	Thr	Pro	Ser	Thr	Gln	Gln	Asn	Ser	Thr	Ser	His	Pro	Thr	Thr	65	70	75	
Thr	Thr	Ser	Trp	Asp	Leu	Lys	Pro	Pro	Thr	Ser	Gln	Ser	Ser	Val	80	85	90	
Leu	Ser	His	Leu	Asp	Phe	Lys	Ser	Gln	Pro	Glu	Pro	Ser	Pro	Val	95	100	105	
Leu	Ser	Gln	Leu	Ser	Gln	Arg	Gln	Gln	His	Gln	Ser	Gln	Ala	Val	110	115	120	
Thr	Val	Pro	Pro	Pro	Gly	Leu	Glu	Ser	Phe	Pro	Ser	Gln	Ala	Lys	125	130	135	
Leu	Arg	Glu	Ser	Thr	Pro	Gly	Asp	Ser	Pro	Ser	Thr	Val	Asn	Lys	140	145	150	
Leu	Leu	Gln	Leu	Pro	Ser	Thr	Thr	Ile	Glu	Asn	Ile	Ser	Val	Ser	155	160	165	
Val	His	Gln	Pro	Gln	Pro	Lys	His	Ile	Lys	Leu	Ala	Lys	Arg	Arg	170	175	180	

Ile	Pro	Pro	Ala	Ser	Lys	Ile	Pro	Ala	Ser	Ala	Val	Glu	Met	Pro
				185					190					195
Gly	Ser	Ala	Asp	Val	Thr	Gly	Leu	Asn	Val	Gln	Phe	Gly	Ala	Leu
				200					205					210
Glu	Phe	Gly	Ser	Glu	Pro	Ser	Leu	Ser	Glu	Phe	Gly	Ser	Ala	Pro
				215					220					225
Ser	Ser	Glu	Asn	Ser	Asn	Gln	Ile	Pro	Ile	Ser	Leu	Tyr	Ser	Lys
				230					235					240
Ser	Leu	Ser	Glu	Pro	Leu	Asn	Thr	Ser	Leu	Ser	Met	Thr	Ser	Ala
				245					250					255
Val	Gln	Asn	Ser	Thr	Tyr	Thr	Thr	Ser	Val	Ile	Thr	Ser	Cys	Ser
				260					265					270
Leu	Thr	Ser	Ser	Ser	Leu	Asn	Ser	Ala	Ser	Pro	Val	Ala	Met	Ser
				275					280					285
Ser	Ser	Tyr	Asp	Gln	Ser	Ser	Val	His	Asn	Arg	Ile	Pro	Tyr	Gln
				290					295					300
Ser	Pro	Val	Ser	Ser	Ser	Glu	Ser	Ala	Pro	Gly	Thr	Ile	Met	Asn
				305					310					315
Gly	His	Gly	Gly	Gly	Arg	Ser	Gln	Gln	Thr	Leu	Asp	Ser	Lys	Tyr
				320					325					330
Ser	Ser	Lys	Leu	Leu	Leu	Ser	Trp	Leu	Val	Pro	Thr	Lys	Gln	Arg
				335					340					345
Lys	Arg	Ile	Ala	His	Val	Met	Trp	Lys	Thr	Pro	Val	Gly	Gln	Trp
				350					355					360
Leu	Ile	Arg												

<210> 253
 <211> 2281
 <212> DNA
 <213> Homo Sapien

<400> 253
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 ctggccctga tggcgacggc ggcggtagcg cgggggtggc tgcgcgcggg 150
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 2281

<210> 254

<211> 447

<212> PRT

<213> Homo Sapien

<400> 254

Met	Glu	Leu	Ser	Gln	Met	Ser	Glu	Leu	Met	Gly	Leu	Ser	Val	Leu
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Leu	Gly	Leu	Leu	Ala	Leu	Met	Ala	Thr	Ala	Ala	Val	Ala	Arg	Gly
				20					25					30
Trp	Leu	Arg	Ala	Gly	Glu	Glu	Arg	Ser	Gly	Arg	Pro	Ala	Cys	Gln
				35					40					45
Lys	Ala	Asn	Gly	Phe	Pro	Pro	Asp	Lys	Ser	Ser	Gly	Ser	Lys	Lys
				50					55					60
Gln	Lys	Gln	Tyr	Gln	Arg	Ile	Arg	Lys	Glu	Lys	Pro	Gln	Gln	His
				65					70					75
Asn	Phe	Thr	His	Arg	Leu	Leu	Ala	Ala	Ala	Leu	Lys	Ser	His	Ser
				80					85					90
Gly	Asn	Ile	Ser	Cys	Met	Asp	Phe	Ser	Ser	Asn	Gly	Lys	Tyr	Leu
				95					100					105
Ala	Thr	Cys	Ala	Asp	Asp	Arg	Thr	Ile	Arg	Ile	Trp	Ser	Thr	Lys
				110					115					120
Asp	Phe	Leu	Gln	Arg	Glu	His	Arg	Ser	Met	Arg	Ala	Asn	Val	Glu
				125					130					135
Leu	Asp	His	Ala	Thr	Leu	Val	Arg	Phe	Ser	Pro	Asp	Cys	Arg	Ala
				140					145					150
Phe	Ile	Val	Trp	Leu	Ala	Asn	Gly	Asp	Thr	Leu	Arg	Val	Phe	Lys
				155					160					165

<211> 744
 <212> DNA
 <213> Homo Sapien

<400> 255
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 caaagacgcc cggggccaggt gccccgtcgc aggtgcccct ggccggagat 100
 gcggtaggag gggcgagcgc gagaagcccc ttcctcggcg ctgccaaccc 150
 gccacccagc ccatggcgaa cccccggctg gggctgcttc tggcgctggg 200
 cctgccgttc ctgctggccc gctggggccg agcctggggg caaatacaga 250
 ccacttctgc aaatgagaat agcactgttt tgccttcata caccagctcc 300
 agctccgatg gcaacctgcg tccggaagcc atcactgcta tcatcgtggt 350
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<210> 256
 <211> 123
 <212> PRT
 <213> Homo Sapien

<400> 256
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 Thr Ser Ala Asn Glu Asn Ser Thr Val Leu Pro Ser Ser Thr Ser
 35 40 45
 Ser Ser Ser Asp Gly Asn Leu Arg Pro Glu Ala Ile Thr Ala Ile
 50 55 60
 Ile Val Val Phe Ser Leu Leu Ala Ala Leu Leu Leu Ala Val Gly
 65 70 75
 Leu Ala Leu Leu Val Arg Lys Leu Arg Glu Lys Arg Gln Thr Glu
 80 85 90

Gly Thr Tyr Arg Pro Ser Ser Glu Glu Gln Phe Ser His Ala Ala
 95 100 105

Glu Ala Arg Ala Pro Gln Asp Ser Lys Glu Thr Val Gln Gly Cys
 110 115 120

Leu Pro Ile

<210> 257
 <211> 3265
 <212> DNA
 <213> Homo Sapien

<400> 257
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 ccagaagatg aaaaaataat tgaacaaata gaggatatgg tgactacagc 200
 ttctacgtac ctgtttgaag ccacagaaaa agatTTTTTT ttcaaaaatg 250
 tatctatatt aattcctgag aattggaagg aaaatcctca gtacaaaagg 300
 ccaaaacatg aaaaccataa acatgctgat gttatagttg caccacctac 350
 actcccaggt agagatgaac catacaccaa gcagttcaca gaatgtggag 400
 agaaaggcga atacattcac ttcacccctg accttctact tggaaaaaaa 450
 caaaatgaat atggaccacc aggcaaactg tttgtccatg agtggggtca 500
 cctccggtgg ggagtgtttg atgagtacaa tgaagatcag cctttctacc 550
 gtgctaagtc aaaaaaaatc gaagcaacaa ggtgttccgc aggtatctct 600
 ggtagaaata gagtttataa gtgtcaagga ggcagctgtc ttagtagagc 650
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 ttagcaattc tgaggatttt aaaaacacca taccatgggt gacaccacct 900
 cctccacctg tcttctcatt gctgaagatc agtcaaagaa ttgtgtgctt 950
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<210> 258

<211> 919

<212> PRT

<213> Homo Sapien

<400> 258

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Leu	His	Gln	Ser	Asn	Thr	Ser	Phe	Ile	Lys	Leu	Asn	Asn	Asn	Gly
				20					25					30
Phe	Glu	Asp	Ile	Val	Ile	Val	Ile	Asp	Pro	Ser	Val	Pro	Glu	Asp
				35					40					45
Glu	Lys	Ile	Ile	Glu	Gln	Ile	Glu	Asp	Met	Val	Thr	Thr	Ala	Ser
				50					55					60
Thr	Tyr	Leu	Phe	Glu	Ala	Thr	Glu	Lys	Arg	Phe	Phe	Phe	Lys	Asn
				65					70					75
Val	Ser	Ile	Leu	Ile	Pro	Glu	Asn	Trp	Lys	Glu	Asn	Pro	Gln	Tyr
				80					85					90
Lys	Arg	Pro	Lys	His	Glu	Asn	His	Lys	His	Ala	Asp	Val	Ile	Val
				95					100					105
Ala	Pro	Pro	Thr	Leu	Pro	Gly	Arg	Asp	Glu	Pro	Tyr	Thr	Lys	Gln

				110					115					120
Phe	Thr	Glu	Cys	Gly	Glu	Lys	Gly	Glu	Tyr	Ile	His	Phe	Thr	Pro
				125					130					135
Asp	Leu	Leu	Leu	Gly	Lys	Lys	Gln	Asn	Glu	Tyr	Gly	Pro	Pro	Gly
				140					145					150
Lys	Leu	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe
				155					160					165
Asp	Glu	Tyr	Asn	Glu	Asp	Gln	Pro	Phe	Tyr	Arg	Ala	Lys	Ser	Lys
				170					175					180
Lys	Ile	Glu	Ala	Thr	Arg	Cys	Ser	Ala	Gly	Ile	Ser	Gly	Arg	Asn
				185					190					195
Arg	Val	Tyr	Lys	Cys	Gln	Gly	Gly	Ser	Cys	Leu	Ser	Arg	Ala	Cys
				200					205					210
Arg	Ile	Asp	Ser	Thr	Thr	Lys	Leu	Tyr	Gly	Lys	Asp	Cys	Gln	Phe
				215					220					225
Phe	Pro	Asp	Lys	Val	Gln	Thr	Glu	Lys	Ala	Ser	Ile	Met	Phe	Met
				230					235					240
Gln	Ser	Ile	Asp	Ser	Val	Val	Glu	Phe	Cys	Asn	Glu	Lys	Thr	His
				245					250					255
Asn	Gln	Glu	Ala	Pro	Ser	Leu	Gln	Asn	Ile	Lys	Cys	Asn	Phe	Arg
				260					265					270
Ser	Thr	Trp	Glu	Val	Ile	Ser	Asn	Ser	Glu	Asp	Phe	Lys	Asn	Thr
				275					280					285
Ile	Pro	Met	Val	Thr	Pro	Pro	Pro	Pro	Pro	Val	Phe	Ser	Leu	Leu
				290					295					300
Lys	Ile	Ser	Gln	Arg	Ile	Val	Cys	Leu	Val	Leu	Asp	Lys	Ser	Gly
				305					310					315
Ser	Met	Gly	Gly	Lys	Asp	Arg	Leu	Asn	Arg	Met	Asn	Gln	Ala	Ala
				320					325					330
Lys	His	Phe	Leu	Leu	Gln	Thr	Val	Glu	Asn	Gly	Ser	Trp	Val	Gly
				335					340					345
Met	Val	His	Phe	Asp	Ser	Thr	Ala	Thr	Ile	Val	Asn	Lys	Leu	Ile
				350					355					360
Gln	Ile	Lys	Ser	Ser	Asp	Glu	Arg	Asn	Thr	Leu	Met	Ala	Gly	Leu
				365					370					375
Pro	Thr	Tyr	Pro	Leu	Gly	Gly	Thr	Ser	Ile	Cys	Ser	Gly	Ile	Lys
				380					385					390
Tyr	Ala	Phe	Gln	Val	Ile	Gly	Glu	Leu	His	Ser	Gln	Leu	Asp	Gly
				395					400					405

Ser Glu Val Leu	Leu Leu Thr Asp Gly	Glu Asp Asn Thr Ala Ser	410	415	420
Ser Cys Ile Asp	Glu Val Lys Gln Ser	Gly Ala Ile Val His Phe	425	430	435
Ile Ala Leu Gly	Arg Ala Ala Asp Glu	Ala Val Ile Glu Met Ser	440	445	450
Lys Ile Thr Gly	Gly Ser His Phe Tyr	Val Ser Asp Glu Ala Gln	455	460	465
Asn Asn Gly Leu	Ile Asp Ala Phe Gly	Ala Leu Thr Ser Gly Asn	470	475	480
Thr Asp Leu Ser	Gln Lys Ser Leu Gln	Leu Glu Ser Lys Gly Leu	485	490	495
Thr Leu Asn Ser	Asn Ala Trp Met Asn	Asp Thr Val Ile Ile Asp	500	505	510
Ser Thr Val Gly	Lys Asp Thr Phe Phe	Leu Ile Thr Trp Asn Ser	515	520	525
Leu Pro Pro Ser	Ile Ser Leu Trp Asp	Pro Ser Gly Thr Ile Met	530	535	540
Glu Asn Phe Thr	Val Asp Ala Thr Ser	Lys Met Ala Tyr Leu Ser	545	550	555
Ile Pro Gly Thr	Ala Lys Val Gly Thr	Trp Ala Tyr Asn Leu Gln	560	565	570
Ala Lys Ala Asn	Pro Glu Thr Leu Thr	Ile Thr Val Thr Ser Arg	575	580	585
Ala Ala Asn Ser	Ser Val Pro Pro Ile	Thr Val Asn Ala Lys Met	590	595	600
Asn Lys Asp Val	Asn Ser Phe Pro Ser	Pro Met Ile Val Tyr Ala	605	610	615
Glu Ile Leu Gln	Gly Tyr Val Pro Val	Leu Gly Ala Asn Val Thr	620	625	630
Ala Phe Ile Glu	Ser Gln Asn Gly His	Thr Glu Val Leu Glu Leu	635	640	645
Leu Asp Asn Gly	Ala Gly Ala Asp Ser	Phe Lys Asn Asp Gly Val	650	655	660
Tyr Ser Arg Tyr	Phe Thr Ala Tyr Thr	Glu Asn Gly Arg Tyr Ser	665	670	675
Leu Lys Val Arg	Ala His Gly Gly Ala	Asn Thr Ala Arg Leu Lys	680	685	690
Leu Arg Pro Pro	Leu Asn Arg Ala Ala	Tyr Ile Pro Gly Trp Val			

695										700					705				
Val	Asn	Gly	Glu	Ile	Glu	Ala	Asn	Pro	Pro	Arg	Pro	Glu	Ile	Asp					
				710					715					720					
Glu	Asp	Thr	Gln	Thr	Thr	Leu	Glu	Asp	Phe	Ser	Arg	Thr	Ala	Ser					
				725					730					735					
Gly	Gly	Ala	Phe	Val	Val	Ser	Gln	Val	Pro	Ser	Leu	Pro	Leu	Pro					
				740					745					750					
Asp	Gln	Tyr	Pro	Pro	Ser	Gln	Ile	Thr	Asp	Leu	Asp	Ala	Thr	Val					
				755					760					765					
His	Glu	Asp	Lys	Ile	Ile	Leu	Thr	Trp	Thr	Ala	Pro	Gly	Asp	Asn					
				770					775					780					
Phe	Asp	Val	Gly	Lys	Val	Gln	Arg	Tyr	Ile	Ile	Arg	Ile	Ser	Ala					
				785					790					795					
Ser	Ile	Leu	Asp	Leu	Arg	Asp	Ser	Phe	Asp	Asp	Ala	Leu	Gln	Val					
				800					805					810					
Asn	Thr	Thr	Asp	Leu	Ser	Pro	Lys	Glu	Ala	Asn	Ser	Lys	Glu	Ser					
				815					820					825					
Phe	Ala	Phe	Lys	Pro	Glu	Asn	Ile	Ser	Glu	Glu	Asn	Ala	Thr	His					
				830					835					840					
Ile	Phe	Ile	Ala	Ile	Lys	Ser	Ile	Asp	Lys	Ser	Asn	Leu	Thr	Ser					
				845					850					855					
Lys	Val	Ser	Asn	Ile	Ala	Gln	Val	Thr	Leu	Phe	Ile	Pro	Gln	Ala					
				860					865					870					
Asn	Pro	Asp	Asp	Ile	Asp	Pro	Thr	Pro	Thr	Pro	Thr	Pro	Thr	Pro					
				875					880					885					
Thr	Pro	Asp	Lys	Ser	His	Asn	Ser	Gly	Val	Asn	Ile	Ser	Thr	Leu					
				890					895					900					
Val	Leu	Ser	Val	Ile	Gly	Ser	Val	Val	Ile	Val	Asn	Phe	Ile	Leu					
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Ser Thr Thr Ile

<210> 259
 <211> 2243
 <212> DNA
 <213> Homo Sapien

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cgccccctgg cctgcagagg cccgaggacc gcttctgtgg cacatacatc 200
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<210> 260

<211> 475

<212> PRT

<213> Homo Sapien

<400> 260

Met	Ala	Val	Val	Ser	Glu	Asp	Asp	Phe	Gln	His	Ser	Ser	Asn	Ser	1	5	10	15
Thr	Tyr	Gly	Thr	Thr	Ser	Ser	Ser	Leu	Arg	Ala	Asp	Gln	Glu	Ala	20	25	30	
Leu	Leu	Glu	Lys	Leu	Leu	Asp	Arg	Pro	Pro	Pro	Gly	Leu	Gln	Arg	35	40	45	
Pro	Glu	Asp	Arg	Phe	Cys	Gly	Thr	Tyr	Ile	Ile	Phe	Phe	Ser	Leu	50	55	60	
Gly	Ile	Gly	Ser	Leu	Leu	Pro	Trp	Asn	Phe	Phe	Ile	Thr	Ala	Lys	65	70	75	
Glu	Tyr	Trp	Met	Phe	Lys	Leu	Arg	Asn	Ser	Ser	Ser	Pro	Ala	Thr	80	85	90	
Gly	Glu	Asp	Pro	Glu	Gly	Ser	Asp	Ile	Leu	Asn	Tyr	Phe	Glu	Ser	95	100	105	
Tyr	Leu	Ala	Val	Ala	Ser	Thr	Val	Pro	Ser	Met	Leu	Cys	Leu	Val	110	115	120	
Ala	Asn	Phe	Leu	Leu	Val	Asn	Arg	Val	Ala	Val	His	Ile	Arg	Val	125	130	135	

Leu	Ala	Ser	Leu	Thr	Val	Ile	Leu	Ala	Ile	Phe	Met	Val	Ile	Thr	140	145	150
Ala	Leu	Val	Lys	Val	Asp	Thr	Ser	Ser	Trp	Thr	Arg	Gly	Phe	Phe	155	160	165
Ala	Val	Thr	Ile	Val	Cys	Met	Val	Ile	Leu	Ser	Gly	Ala	Ser	Thr	170	175	180
Val	Phe	Ser	Ser	Ser	Ile	Tyr	Gly	Met	Thr	Gly	Ser	Phe	Pro	Met	185	190	195
Arg	Asn	Ser	Gln	Ala	Leu	Ile	Ser	Gly	Gly	Ala	Met	Gly	Gly	Thr	200	205	210
Val	Ser	Ala	Val	Ala	Ser	Leu	Val	Asp	Leu	Ala	Ala	Ser	Ser	Asp	215	220	225
Val	Arg	Asn	Ser	Ala	Leu	Ala	Phe	Phe	Leu	Thr	Ala	Thr	Ile	Phe	230	235	240
Leu	Val	Leu	Cys	Met	Gly	Leu	Tyr	Leu	Leu	Leu	Ser	Arg	Leu	Glu	245	250	255
Tyr	Ala	Arg	Tyr	Tyr	Met	Arg	Pro	Val	Leu	Ala	Ala	His	Val	Phe	260	265	270
Ser	Gly	Glu	Glu	Glu	Leu	Pro	Gln	Asp	Ser	Leu	Ser	Ala	Pro	Ser	275	280	285
Val	Ala	Ser	Arg	Phe	Ile	Asp	Ser	His	Thr	Pro	Pro	Leu	Arg	Pro	290	295	300
Ile	Leu	Lys	Lys	Thr	Ala	Ser	Leu	Gly	Phe	Cys	Val	Thr	Tyr	Val	305	310	315
Phe	Phe	Ile	Thr	Ser	Leu	Ile	Tyr	Pro	Ala	Val	Cys	Thr	Asn	Ile	320	325	330
Glu	Ser	Leu	Asn	Lys	Gly	Ser	Gly	Ser	Leu	Trp	Thr	Thr	Lys	Phe	335	340	345
Phe	Ile	Pro	Leu	Thr	Thr	Phe	Leu	Leu	Tyr	Asn	Phe	Ala	Asp	Leu	350	355	360
Cys	Gly	Arg	Gln	Leu	Thr	Ala	Trp	Ile	Gln	Val	Pro	Gly	Pro	Asn	365	370	375
Ser	Lys	Ala	Leu	Pro	Gly	Phe	Val	Leu	Leu	Arg	Thr	Cys	Leu	Ile	380	385	390
Pro	Leu	Phe	Val	Leu	Cys	Asn	Tyr	Gln	Pro	Arg	Val	His	Leu	Lys	395	400	405
Thr	Val	Val	Phe	Gln	Ser	Asp	Val	Tyr	Pro	Ala	Leu	Leu	Ser	Ser	410	415	420
Leu	Leu	Gly	Leu	Ser	Asn	Gly	Tyr	Leu	Ser	Thr	Leu	Ala	Leu	Leu			

425	430	435
Tyr Gly Pro Lys Ile Val Pro Arg Glu Leu Ala Glu Ala Thr Gly		
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Val Val Met Ser Phe Tyr Val Cys Leu Gly Leu Thr Leu Gly Ser		
455	460	465
Ala Cys Ser Thr Leu Leu Val His Leu Ile		
470	475	

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 <211> 3038
 <212> DNA
 <213> Homo Sapien

<400> 261
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 ggatgatttc atctccatta gcctgctgtc tctggctatg ttggtgggat 200
 gttacgtggc cggaatcatt cccttggtgt ttaatttctc agaggaacga 250
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 ggcagtcac gtgcctgaag gagtacatgc ctttatgaa gatattcttg 350
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<211> 532

<212> PRT

<213> Homo Sapien

<400> 264

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Leu	Gln	Glu	Trp	Glu	Glu	Gln	His	Arg	Asn	Tyr	Val	Ser	Ser	Leu
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Lys	Arg	Gln	Ile	Ala	Gln	Leu	Lys	Glu	Glu	Leu	Gln	Glu	Arg	Ser
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Glu	Gln	Leu	Arg	Asn	Gly	Gln	Tyr	Gln	Ala	Ser	Asp	Ala	Ala	Gly
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Asn	Pro	Gly	Ile	Ile	Tyr	Gly	His	His	Asp	Ala	Val	Pro	Pro	Leu	395	400	405
Glu	Gln	Gln	Leu	Val	Ile	Lys	Lys	Glu	Thr	Gly	Phe	Trp	Arg	Asp	410	415	420
Phe	Gly	Phe	Gly	Met	Thr	Cys	Gln	Tyr	Arg	Ser	Asp	Phe	Ile	Asn	425	430	435
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<210> 266

<211> 1089

<212> PRT

<213> Homo Sapien

<400> 266

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Cys	Trp	Met	Ala	Ser	Arg	Phe	Ser	Arg	Val	Val	Leu	Val	Leu	Ile	65	70	75	
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Tyr	Arg	Ser	Gln	Val	Asp	Pro	Pro	Thr	Thr	Thr	Met	Gln	Arg	Leu	125	130	135	
Lys	Ala	Leu	Thr	Thr	Gly	Ser	Leu	Pro	Thr	Phe	Ile	Asp	Ala	Gly	140	145	150	
Ser	Asn	Phe	Ala	Ser	His	Ala	Ile	Val	Glu	Asp	Asn	Leu	Ile	Lys	155	160	165	
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Thr Leu Phe Pro	Ile Pro Gly Pro Val	Leu Leu Leu Leu Leu	Phe
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Arg Leu Ala Val	Phe Phe Ser Asp Ser	Phe Val Val Ala Glu	Ala
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Arg Ala Thr Pro	Phe Leu Leu Gly Ser	Phe Ile Leu Leu Leu	Val

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Val Gln Leu His	Trp Glu Gly Gln Leu	Leu Pro Pro Lys Leu Leu			
	590		595		600
Thr Met Pro Arg	Leu Gly Thr Ser Ala	Thr Thr Asn Pro Pro Arg			
	605		610		615
His Asn Gly Ala	Tyr Ala Leu Arg Leu	Gly Ile Gly Leu Leu Leu			
	620		625		630
Cys Thr Arg Leu	Ala Gly Leu Phe His	Arg Cys Pro Glu Glu Thr			
	635		640		645
Pro Val Cys His	Ser Ser Pro Trp Leu	Ser Pro Leu Ala Ser Met			
	650		655		660
Val Gly Gly Arg	Ala Lys Asn Leu Trp	Tyr Gly Ala Cys Val Ala			
	665		670		675
Ala Leu Val Ala	Leu Leu Ala Ala Val	Arg Leu Trp Leu Arg Arg			
	680		685		690
Tyr Gly Asn Leu	Lys Ser Pro Glu Pro	Pro Met Leu Phe Val Arg			
	695		700		705
Trp Gly Leu Pro	Leu Met Ala Leu Gly	Thr Ala Ala Tyr Trp Ala			
	710		715		720
Leu Ala Ser Gly	Ala Asp Glu Ala Pro	Pro Arg Leu Arg Val Leu			
	725		730		735
Val Ser Gly Ala	Ser Met Val Leu Pro	Arg Ala Val Ala Gly Leu			
	740		745		750
Ala Ala Ser Gly	Leu Ala Leu Leu Leu	Trp Lys Pro Val Thr Val			
	755		760		765
Leu Val Lys Ala	Gly Ala Gly Ala Pro	Arg Thr Arg Thr Val Leu			
	770		775		780
Thr Pro Phe Ser	Gly Pro Pro Thr Ser	Gln Ala Asp Leu Asp Tyr			
	785		790		795
Val Val Pro Gln	Ile Tyr Arg His Met	Gln Glu Glu Phe Arg Gly			
	800		805		810
Arg Leu Glu Arg	Thr Lys Ser Gln Gly	Pro Leu Thr Val Ala Ala			
	815		820		825
Tyr Gln Leu Gly	Ser Val Tyr Ser Ala	Ala Met Val Thr Ala Leu			
	830		835		840
Thr Leu Leu Ala	Phe Pro Leu Leu Leu	Leu His Ala Glu Arg Ile			
	845		850		855
Ser Leu Val Phe	Leu Leu Leu Phe Leu	Gln Ser Phe Leu Leu Leu			
	860		865		870

His Leu Leu Ala Ala Gly Ile Pro Val Thr Thr Pro Gly Pro Phe
875 880 885

Thr Val Pro Trp Gln Ala Val Ser Ala Trp Ala Leu Met Ala Thr
890 895 900

Gln Thr Phe Tyr Ser Thr Gly His Gln Pro Val Phe Pro Ala Ile
905 910 915

His Trp His Ala Ala Phe Val Gly Phe Pro Glu Gly His Gly Ser
920 925 930

Cys Thr Trp Leu Pro Ala Leu Leu Val Gly Ala Asn Thr Phe Ala
935 940 945

Ser His Leu Leu Phe Ala Val Gly Cys Pro Leu Leu Leu Leu Trp
950 955 960

Pro Phe Leu Cys Glu Ser Gln Gly Leu Arg Lys Arg Gln Gln Pro
965 970 975

Pro Gly Asn Glu Ala Asp Ala Arg Val Arg Pro Glu Glu Glu Glu
980 985 990

Glu Pro Leu Met Glu Met Arg Leu Arg Asp Ala Pro Gln His Phe
995 1000 1005

Tyr Ala Ala Leu Leu Gln Leu Gly Leu Lys Tyr Leu Phe Ile Leu
1010 1015 1020

Gly Ile Gln Ile Leu Ala Cys Ala Leu Ala Ala Ser Ile Leu Arg
1025 1030 1035

Arg His Leu Met Val Trp Lys Val Phe Ala Pro Lys Phe Ile Phe
1040 1045 1050

Glu Ala Val Gly Phe Ile Val Ser Ser Val Gly Leu Leu Leu Gly
1055 1060 1065

Ile Ala Leu Val Met Arg Val Asp Gly Ala Val Ser Ser Trp Phe
1070 1075 1080

Arg Gln Leu Phe Leu Ala Gln Gln Arg
1085

<210> 267

<211> 1701

<212> DNA

<213> Homo Sapien

<220>

<221> unsure

<222> 1528

<223> unknown base

<400> 267

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tgtcctgggg atccagaaac ccatgatacc ctactgaaca ccgaatcccc 100
 tggaagccca cagagacaga gacagcaaga gaagcagaga taaatacact 150
 caogccagga gctcgctcgc tctctctctc tctctctcac tctccctcc 200
 ctctctctct gctgtgcta gtcctctagt cctcaaattc ccagtcccct 250
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 ggggtgtaga tctggccaga aacactgtag gagtagtaag cagatgtcct 1400
 ccttccccctg gacatctctt agagaggaat ggaccagggc tgtcattcca 1450
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gaaatcgctg tgttgttaat gcagaganca aactctgttt agttgcaggg 1550
gaagtttggg atatacccca aagtcctcta cccctcact tttatggccc 1600
tttccctaga tatactgcgg gatctctcct taggataaag agttgctgtt 1650
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t 1701

<210> 268
<211> 337
<212> PRT
<213> Homo Sapien

<400> 268
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Ala Asp Gly Gly Gln His Trp Thr Tyr Glu Gly Pro His Gly Gln
20 25 30
Asp His Trp Pro Ala Ser Tyr Pro Glu Cys Gly Asn Asn Ala Gln
35 40 45
Ser Pro Ile Asp Ile Gln Thr Asp Ser Val Thr Phe Asp Pro Asp
50 55 60
Leu Pro Ala Leu Gln Pro His Gly Tyr Asp Gln Pro Gly Thr Glu
65 70 75
Pro Leu Asp Leu His Asn Asn Gly His Thr Val Gln Leu Ser Leu
80 85 90
Pro Ser Thr Leu Tyr Leu Gly Gly Leu Pro Arg Lys Tyr Val Ala
95 100 105
Ala Gln Leu His Leu His Trp Gly Gln Lys Gly Ser Pro Gly Gly
110 115 120
Ser Glu His Gln Ile Asn Ser Glu Ala Thr Phe Ala Glu Leu His
125 130 135
Ile Val His Tyr Asp Ser Asp Ser Tyr Asp Ser Leu Ser Glu Ala
140 145 150
Ala Glu Arg Pro Gln Gly Leu Ala Val Leu Gly Ile Leu Ile Glu
155 160 165
Val Gly Glu Thr Lys Asn Ile Ala Tyr Glu His Ile Leu Ser His
170 175 180
Leu His Glu Val Arg His Lys Asp Gln Lys Thr Ser Val Pro Pro
185 190 195
Phe Asn Leu Arg Glu Leu Leu Pro Lys Gln Leu Gly Gln Tyr Phe
200 205 210

Arg Tyr Asn Gly Ser Leu Thr Thr Pro Pro Cys Tyr Gln Ser Val
215 220 225

Leu Trp Thr Val Phe Tyr Arg Arg Ser Gln Ile Ser Met Glu Gln
230 235 240

Leu Glu Lys Leu Gln Gly Thr Leu Phe Ser Thr Glu Glu Glu Pro
245 250 255

Ser Lys Leu Leu Val Gln Asn Tyr Arg Ala Leu Gln Pro Leu Asn
260 265 270

Gln Arg Met Val Phe Ala Ser Phe Ile Gln Ala Gly Ser Ser Tyr
275 280 285

Thr Thr Gly Glu Met Leu Ser Leu Gly Val Gly Ile Leu Val Gly
290 295 300

Cys Leu Cys Leu Leu Leu Ala Val Tyr Phe Ile Ala Arg Lys Ile
305 310 315

Arg Lys Lys Arg Leu Glu Asn Arg Lys Ser Val Val Phe Thr Ser
320 325 330

Ala Gln Ala Thr Thr Glu Ala
335

<210> 269
<211> 1300
<212> PRT
<213> Homo Sapien

<400> 269
Gly Thr Gly Gly Cys Gly Cys Thr Gly Gly Cys Gly Gly Thr Thr
1 5 10 15

Gly Cys Thr Gly Thr Cys Ala Gly Cys Thr Gly Ala Thr Thr Cys
20 25 30

Cys Cys Gly Gly Gly Gly Thr Thr Gly Gly Thr Gly Gly Cys Ala
35 40 45

Gly Cys Gly Gly Cys Gly Gly Thr Ala Gly Cys Ala Gly Cys Ala
50 55 60

Ala Thr Gly Gly Ala Cys Thr Thr Thr Cys Thr Cys Cys Thr Gly
65 70 75

Gly Gly Gly Ala Ala Cys Cys Cys Gly Thr Thr Cys Ala Gly Cys
80 85 90

Thr Cys Thr Cys Cys Ala Gly Thr Gly Gly Gly Ala Cys Ala Gly
95 100 105

Cys Gly Cys Ala Thr Cys Gly Ala Gly Ala Ala Ala Gly Cys Cys
110 115 120

Ala Cys Ala Gly Ala Thr Gly Gly Cys Thr Cys Cys Cys Thr Gly

	125		130		135
Cys Ala Gly Ala	Gly Cys Gly Ala Gly	Gly Ala Cys Thr Gly Gly			
	140		145		150
Gly Cys Cys Cys	Thr Cys Ala Ala Cys	Ala Thr Gly Gly Ala Gly			
	155		160		165
Ala Thr Cys Thr	Gly Cys Gly Ala Cys	Ala Thr Cys Ala Thr Cys			
	170		175		180
Ala Ala Cys Gly	Ala Gly Ala Cys Gly	Gly Ala Gly Gly Ala Ala			
	185		190		195
Gly Gly Thr Cys	Cys Cys Ala Ala Ala	Gly Ala Thr Gly Cys Cys			
	200		205		210
Cys Thr Cys Cys	Gly Ala Gly Cys Ala	Gly Thr Ala Ala Ala Gly			
	215		220		225
Ala Ala Gly Ala	Gly Ala Ala Thr Cys	Gly Thr Gly Gly Gly Gly			
	230		235		240
Ala Ala Thr Ala	Ala Gly Ala Ala Cys	Thr Thr Cys Cys Ala Cys			
	245		250		255
Gly Ala Gly Gly	Thr Gly Ala Thr Gly	Cys Thr Gly Gly Cys Thr			
	260		265		270
Cys Thr Cys Ala	Cys Ala Gly Thr Cys	Thr Thr Ala Gly Ala Ala			
	275		280		285
Ala Cys Cys Thr	Gly Thr Gly Thr Cys	Ala Ala Gly Ala Ala Cys			
	290		295		300
Thr Gly Cys Gly	Gly Gly Cys Ala Cys	Cys Gly Cys Thr Thr Cys			
	305		310		315
Cys Ala Cys Gly	Thr Gly Cys Thr Gly	Gly Thr Gly Gly Cys Cys			
	320		325		330
Ala Gly Cys Cys	Ala Gly Gly Ala Cys	Thr Thr Cys Gly Thr Gly			
	335		340		345
Gly Ala Gly Ala	Gly Thr Gly Thr Gly	Cys Thr Gly Gly Thr Gly			
	350		355		360
Ala Gly Gly Ala	Cys Cys Ala Thr Cys	Cys Thr Gly Cys Cys Cys			
	365		370		375
Ala Ala Gly Ala	Ala Cys Ala Ala Cys	Cys Cys Ala Cys Cys Cys			
	380		385		390
Ala Cys Cys Ala	Thr Cys Gly Thr Gly	Cys Ala Thr Gly Ala Cys			
	395		400		405
Ala Ala Ala Gly	Thr Gly Cys Thr Cys	Ala Ala Cys Cys Thr Cys			
	410		415		420

Ala Thr Cys Cys	Ala Gly Thr Cys Cys	Thr Gly Gly Gly Cys Thr	425	430	435
Gly Ala Cys Gly	Cys Gly Thr Thr Cys	Cys Gly Cys Ala Gly Cys	440	445	450
Thr Cys Gly Cys	Cys Cys Gly Ala Thr	Cys Thr Gly Ala Cys Ala	455	460	465
Gly Gly Thr Gly	Thr Gly Gly Thr Cys	Ala Cys Cys Ala Thr Cys	470	475	480
Thr Ala Thr Gly	Ala Gly Gly Ala Cys	Cys Thr Gly Cys Gly Gly	485	490	495
Ala Gly Gly Ala	Ala Ala Gly Gly Cys	Cys Thr Gly Gly Ala Gly	500	505	510
Thr Thr Cys Cys	Cys Cys Ala Thr Gly	Ala Cys Thr Gly Ala Cys	515	520	525
Cys Thr Gly Gly	Ala Cys Ala Thr Gly	Cys Thr Gly Thr Cys Ala	530	535	540
Cys Cys Cys Ala	Thr Cys Cys Ala Cys	Ala Cys Ala Cys Cys Cys	545	550	555
Ala Gly Ala Gly	Gly Ala Cys Cys Gly	Thr Gly Thr Thr Cys Ala	560	565	570
Ala Cys Thr Cys	Ala Gly Ala Gly Ala	Cys Ala Cys Ala Ala Thr	575	580	585
Cys Ala Gly Gly	Ala Cys Ala Gly Gly	Ala Thr Thr Cys Thr Gly	590	595	600
Thr Gly Gly Gly	Cys Ala Cys Thr Gly	Ala Cys Thr Cys Cys Ala	605	610	615
Gly Cys Cys Ala	Gly Cys Ala Ala Gly	Ala Gly Gly Ala Cys Thr	620	625	630
Cys Thr Gly Gly	Cys Cys Ala Gly Cys	Ala Thr Gly Cys Thr Gly	635	640	645
Cys Cys Cys Cys	Thr Cys Thr Gly Cys	Cys Cys Gly Cys Cys Cys	650	655	660
Cys Gly Cys Cys	Cys Ala Thr Ala Cys	Thr Cys Thr Cys Cys Gly	665	670	675
Gly Thr Gly Ala	Cys Ala Cys Gly Cys	Cys Cys Ala Thr Ala Gly	680	685	690
Cys Ala Cys Cys	Ala Ala Cys Cys Cys	Cys Gly Gly Ala Ala Cys	695	700	705
Ala Gly Ala Thr	Thr Gly Gly Gly Ala	Ala Gly Cys Thr Gly Cys			

	710		715		720
Gly Cys Ala Gly	Thr Gly Ala Gly Cys	Thr Gly Gly Ala Gly Ala			
	725		730		735
Thr Gly Gly Thr	Gly Ala Gly Thr Gly	Gly Gly Ala Ala Cys Gly			
	740		745		750
Thr Gly Ala Gly	Gly Gly Thr Gly Ala	Thr Gly Thr Cys Gly Gly			
	755		760		765
Ala Gly Ala Thr	Gly Cys Thr Gly Ala	Cys Gly Gly Ala Gly Cys			
	770		775		780
Thr Gly Gly Thr	Gly Cys Cys Cys Ala	Cys Cys Cys Ala Gly Gly			
	785		790		795
Cys Cys Gly Ala	Gly Cys Cys Cys Gly	Cys Ala Gly Ala Cys Cys			
	800		805		810
Thr Gly Gly Ala	Gly Cys Thr Gly Cys	Thr Gly Cys Ala Gly Gly			
	815		820		825
Ala Gly Cys Thr	Cys Ala Ala Cys Cys	Gly Cys Ala Cys Gly Thr			
	830		835		840
Gly Cys Cys Gly	Ala Gly Cys Cys Ala	Thr Gly Cys Ala Gly Cys			
	845		850		855
Ala Gly Cys Gly	Gly Gly Thr Cys Cys	Thr Gly Ala Gly Thr Gly			
	860		865		870
Ala Thr Ala Cys	Cys Cys Thr Gly Cys	Thr Cys Cys Gly Gly Gly			
	875		880		885
Cys Cys Cys Ala	Thr Gly Cys Cys Cys	Cys Ala Ala Gly Gly Ala			
	890		895		900
Gly Cys Cys Cys	Thr Thr Cys Ala Gly	Ala Gly Cys Cys Cys Ala			
	905		910		915
Cys Ala Cys Thr	Gly Cys Cys Ala Gly	Thr Cys Gly Ala Gly Gly			
	920		925		930
Cys Cys Thr Gly	Gly Cys Thr Gly Gly	Ala Gly Gly Cys Thr Gly			
	935		940		945
Gly Cys Cys Ala	Cys Ala Gly Thr Gly	Gly Ala Ala Ala Thr Thr			
	950		955		960
Cys Thr Gly Cys	Cys Gly Ala Gly Cys	Cys Thr Ala Thr Thr Gly			
	965		970		975
Thr Cys Cys Cys	Thr Ala Cys Cys Cys	Thr Gly Cys Thr Cys Thr			
	980		985		990
Gly Cys Thr Gly	Cys Ala Thr Gly Gly	Gly Gly Cys Cys Cys Cys			
	995		1000		1005

Ala Thr Gly Gly Cys Thr Thr Thr Gly Gly Cys Thr Gly Gly Cys	1010	1015	1020
Cys Ala Cys Thr Gly Ala Gly Gly Gly Thr Ala Gly Gly Gly Thr	1025	1030	1035
Gly Thr Gly Gly Ala Gly Gly Thr Gly Thr Gly Gly Ala Gly Gly	1040	1045	1050
Cys Cys Cys Cys Cys Thr Gly Ala Gly Gly Ala Gly Cys Thr Gly	1055	1060	1065
Cys Gly Gly Cys Gly Gly Cys Cys Cys Ala Gly Gly Thr Ala Cys	1070	1075	1080
Gly Ala Ala Gly Cys Thr Gly Cys Ala Ala Cys Thr Cys Thr Gly	1085	1090	1095
Cys Gly Cys Gly Cys Ala Gly Thr Gly Gly Gly Cys Gly Ala Gly	1100	1105	1110
Ala Thr Cys Thr Cys Ala Thr Cys Ala Gly Cys Cys Cys Cys Ala	1115	1120	1125
Gly Gly Cys Thr Gly Cys Ala Gly Gly Thr Gly Ala Gly Gly Cys	1130	1135	1140
Thr Thr Cys Ala Gly Gly Gly Gly Ala Thr Gly Cys Thr Gly Gly	1145	1150	1155
Gly Gly Cys Cys Cys Cys Ala Cys Thr Gly Cys Cys Cys Cys Thr	1160	1165	1170
Cys Cys Gly Cys Thr Gly Cys Cys Thr Thr Gly Cys Cys Cys Thr	1175	1180	1185
Cys Cys Ala Thr Cys Cys Thr Thr Cys Cys Thr Cys Thr Gly Thr	1190	1195	1200
Thr Cys Cys Thr Thr Cys Thr Gly Gly Cys Cys Gly Gly Gly Cys	1205	1210	1215
Ala Cys Cys Ala Cys Ala Gly Cys Ala Cys Thr Gly Gly Gly Gly	1220	1225	1230
Cys Thr Cys Ala Cys Cys Thr Cys Thr Thr Gly Gly Thr Thr Gly	1235	1240	1245
Ala Thr Cys Cys Thr Cys Thr Thr Gly Thr Ala Cys Thr Gly Gly	1250	1255	1260
Gly Ala Gly Ala Gly Gly Thr Gly Cys Cys Thr Thr Thr Thr Gly	1265	1270	1275
Thr Ala Thr Cys Cys Cys Cys Ala Ala Thr Thr Ala Ala Ala Gly	1280	1285	1290
Gly Thr Ala Gly Ala Ala Ala Cys Cys			

1295

1300

<210> 270

<211> 209

<212> PRT

<213> Homo Sapien

<400> 270

Met Asp Phe Leu Leu Gly Asn Pro Phe Ser Ser Pro Val Gly Gln
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Arg Ile Glu Lys Ala Thr Asp Gly Ser Leu Gln Ser Glu Asp Trp
 20 25 30

Ala Leu Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu
 35 40 45

Gly Pro Lys Asp Ala Leu Arg Ala Val Lys Lys Arg Ile Val Gly
 50 55 60

Asn Lys Asn Phe His Glu Val Met Leu Ala Leu Thr Val Leu Glu
 65 70 75

Thr Cys Val Lys Asn Cys Gly His Arg Phe His Val Leu Val Ala
 80 85 90

Ser Gln Asp Phe Val Glu Ser Val Leu Val Arg Thr Ile Leu Pro
 95 100 105

Lys Asn Asn Pro Pro Thr Ile Val His Asp Lys Val Leu Asn Leu
 110 115 120

Ile Gln Ser Trp Ala Asp Ala Phe Arg Ser Ser Pro Asp Leu Thr
 125 130 135

Gly Val Val Thr Ile Tyr Glu Asp Leu Arg Arg Lys Gly Leu Glu
 140 145 150

Phe Pro Met Thr Asp Leu Asp Met Leu Ser Pro Ile His Thr Pro
 155 160 165

Arg Gly Pro Cys Ser Thr Gln Arg His Asn Gln Asp Arg Ile Leu
 170 175 180

Trp Ala Leu Thr Pro Ala Ser Lys Arg Thr Leu Ala Ser Met Leu
 185 190 195

Pro Leu Cys Pro Pro Arg Pro Tyr Ser Pro Val Thr Arg Pro
 200 205

<210> 271

<211> 1114

<212> DNA

<213> Homo Sapien

<400> 271

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tctgctgact gtggccaccg cctgatgct gcccgtaag cccccgcag 150
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aggccctaca tggcatccgt gcgcttcggg ggccaacatc actgcggagg 250
cttcctgctg cgagcccgtt ggggtggtctt ggccgcccac tgcttcagcc 300
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aaaaaaaaa gaaa 1114

<210> 272

<211> 283

<212> PRT

<213> Homo Sapien

<400> 272

Met	Gly	Leu	Gly	Leu	Arg	Gly	Trp	Gly	Arg	Pro	Leu	Leu	Thr	Val
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Ala	Thr	Ala	Leu	Met	Leu	Pro	Val	Lys	Pro	Pro	Ala	Gly	Ser	Trp
			20						25					30
Gly	Ala	Gln	Ile	Ile	Gly	Gly	His	Glu	Val	Thr	Pro	His	Ser	Arg
			35						40					45

Pro Tyr Met Ala Ser Val Arg Phe Gly Gly Gln His His Cys Gly
50 55 60

Gly Phe Leu Leu Arg Ala Arg Trp Val Val Ser Ala Ala His Cys
65 70 75

Phe Ser His Arg Asp Leu Arg Thr Gly Leu Val Val Leu Gly Ala
80 85 90

His Val Leu Ser Thr Ala Glu Pro Thr Gln Gln Val Phe Gly Ile
95 100 105

Asp Ala Leu Thr Thr His Pro Asp Tyr His Pro Met Thr His Ala
110 115 120

Asn Asp Ile Cys Leu Leu Arg Leu Asn Gly Ser Ala Val Leu Gly
125 130 135

Pro Ala Val Gly Leu Leu Arg Leu Pro Gly Arg Arg Ala Arg Pro
140 145 150

Pro Thr Ala Gly Thr Arg Cys Arg Val Ala Gly Trp Gly Phe Val
155 160 165

Ser Asp Phe Glu Glu Leu Pro Pro Gly Leu Met Glu Ala Lys Val
170 175 180

Arg Val Leu Asp Pro Asp Val Cys Asn Ser Ser Trp Lys Gly His
185 190 195

Leu Thr Leu Thr Met Leu Cys Thr Arg Ser Gly Asp Ser His Arg
200 205 210

Arg Gly Phe Cys Ser Ala Asp Ser Gly Gly Pro Leu Val Cys Arg
215 220 225

Asn Arg Ala His Gly Leu Val Ser Phe Ser Gly Leu Trp Cys Gly
230 235 240

Asp Pro Lys Thr Pro Asp Val Tyr Thr Gln Val Ser Ala Phe Val
245 250 255

Ala Trp Ile Trp Asp Val Val Arg Arg Ser Ser Pro Gln Pro Gly
260 265 270

Pro Leu Pro Gly Thr Thr Arg Pro Pro Gly Glu Ala Ala
275 280

<210> 273

<211> 2249

<212> DNA

<213> Homo Sapien

<400> 273

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gggcgacacg ttctcggcgc tgaccagcgt ggcgcgcgcc ctggcgcccg 150
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 aacgcctgca gtctgactgg aggaatgtgg tacatagtct ggaggccagt 350
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<210> 274

<211> 544

<212> PRT

<213> Homo Sapien

<400> 274

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Leu	Gly	Thr	Gly	Asp	Pro	Glu	Arg	Ala	Ala	Ala	Arg	Gly	Asp	Thr
				20					25				30	
Phe	Ser	Ala	Leu	Thr	Ser	Val	Ala	Arg	Ala	Leu	Ala	Pro	Glu	Arg
				35					40				45	
Arg	Leu	Leu	Gly	Leu	Leu	Arg	Arg	Tyr	Leu	Arg	Gly	Glu	Glu	Ala
				50					55				60	
Arg	Leu	Arg	Asp	Leu	Thr	Arg	Phe	Tyr	Asp	Lys	Val	Leu	Ser	Leu
				65					70				75	
His	Glu	Asp	Ser	Thr	Thr	Pro	Val	Ala	Asn	Pro	Leu	Leu	Ala	Phe
				80					85				90	
Thr	Leu	Ile	Lys	Arg	Leu	Gln	Ser	Asp	Trp	Arg	Asn	Val	Val	His
				95					100				105	
Ser	Leu	Glu	Ala	Ser	Glu	Asn	Ile	Arg	Ala	Leu	Lys	Asp	Gly	Tyr
				110					115				120	

Glu Lys Val Glu Gln Asp Leu Pro Ala Phe Glu Asp Leu Glu Gly	125	130	135
Ala Ala Arg Ala Leu Met Arg Leu Gln Asp Val Tyr Met Leu Asn	140	145	150
Val Lys Gly Leu Ala Arg Gly Val Phe Gln Arg Val Thr Gly Ser	155	160	165
Ala Ile Thr Asp Leu Tyr Ser Pro Lys Arg Leu Phe Ser Leu Thr	170	175	180
Gly Asp Asp Cys Phe Gln Val Gly Lys Val Ala Tyr Asp Met Gly	185	190	195
Asp Tyr Tyr His Ala Ile Pro Trp Leu Glu Glu Ala Val Ser Leu	200	205	210
Phe Arg Gly Ser Tyr Gly Glu Trp Lys Thr Glu Asp Glu Ala Ser	215	220	225
Leu Glu Asp Ala Leu Asp His Leu Ala Phe Ala Tyr Phe Arg Ala	230	235	240
Gly Asn Val Ser Cys Ala Leu Ser Leu Ser Arg Glu Phe Leu Leu	245	250	255
Tyr Ser Pro Asp Asn Lys Arg Met Ala Arg Asn Val Leu Lys Tyr	260	265	270
Glu Arg Leu Leu Ala Glu Ser Pro Asn His Val Val Ala Glu Ala	275	280	285
Val Ile Gln Arg Pro Asn Ile Pro His Leu Gln Thr Arg Asp Thr	290	295	300
Tyr Glu Gly Leu Cys Gln Thr Leu Gly Ser Gln Pro Thr Leu Tyr	305	310	315
Gln Ile Pro Ser Leu Tyr Cys Ser Tyr Glu Thr Asn Ser Asn Ala	320	325	330
Tyr Leu Leu Leu Gln Pro Ile Arg Lys Glu Val Ile His Leu Glu	335	340	345
Pro Tyr Ile Ala Leu Tyr His Asp Phe Val Ser Asp Ser Glu Ala	350	355	360
Gln Lys Ile Arg Glu Leu Ala Glu Pro Trp Leu Gln Arg Ser Val	365	370	375
Val Ala Ser Gly Glu Lys Gln Leu Gln Val Glu Tyr Arg Ile Ser	380	385	390
Lys Ser Ala Trp Leu Lys Asp Thr Val Asp Pro Lys Leu Val Thr	395	400	405
Leu Asn His Arg Ile Ala Ala Leu Thr Gly Leu Asp Val Arg Pro			

410	415	420
Pro Tyr Ala Glu Tyr Leu Gln Val Val	Asn Tyr Gly Ile Gly Gly	
425	430	435
His Tyr Glu Pro His Phe Asp His Ala	Thr Ser Pro Ser Ser Pro	
440	445	450
Leu Tyr Arg Met Lys Ser Gly Asn Arg	Val Ala Thr Phe Met Ile	
455	460	465
Tyr Leu Ser Ser Val Glu Ala Gly Gly	Ala Thr Ala Phe Ile Tyr	
470	475	480
Ala Asn Leu Ser Val Pro Val Val Arg	Asn Ala Ala Leu Phe Trp	
485	490	495
Trp Asn Leu His Arg Ser Gly Glu Gly	Asp Ser Asp Thr Leu His	
500	505	510
Ala Gly Cys Pro Val Leu Val Gly Asp	Lys Trp Val Ala Asn Lys	
515	520	525
Trp Ile His Glu Tyr Gly Gln Glu Phe	Arg Arg Pro Cys Ser Ser	
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Ser Pro Glu Asp		

<210> 275
 <211> 1915
 <212> DNA
 <213> Homo Sapien

<400> 275
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 caggtgtcaa tgacttttgg ctgggcatca atgacatggc cacggaaggc 450
 aagtttgttg acgtcaacgg aatcgctatc tccttcctca actgggaccg 500
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<400> 276

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Val	Ile	Cys	Ile	Leu	Val	Ile	Thr	Leu	Leu	Leu	Asp	Gln	Thr	Thr	
				20					25					30	
Ser	His	Thr	Ser	Arg	Leu	Lys	Ala	Arg	Lys	His	Ser	Lys	Arg	Arg	
				35					40					45	
Val	Arg	Asp	Lys	Asp	Gly	Asp	Leu	Lys	Thr	Gln	Ile	Glu	Lys	Leu	
				50					55					60	
Trp	Thr	Glu	Val	Asn	Ala	Leu	Lys	Glu	Ile	Gln	Ala	Leu	Gln	Thr	
				65					70					75	
Val	Cys	Leu	Arg	Gly	Thr	Lys	Val	His	Lys	Lys	Cys	Tyr	Leu	Ala	
				80					85					90	
Ser	Glu	Gly	Leu	Lys	His	Phe	His	Glu	Ala	Asn	Glu	Asp	Cys	Ile	
				95					100					105	
Ser	Lys	Gly	Gly	Ile	Leu	Val	Ile	Pro	Arg	Asn	Ser	Asp	Glu	Ile	
				110					115					120	
Asn	Ala	Leu	Gln	Asp	Tyr	Gly	Lys	Arg	Ser	Leu	Pro	Gly	Val	Asn	
				125					130					135	
Asp	Phe	Trp	Leu	Gly	Ile	Asn	Asp	Met	Val	Thr	Glu	Gly	Lys	Phe	
				140					145					150	
Val	Asp	Val	Asn	Gly	Ile	Ala	Ile	Ser	Phe	Leu	Asn	Trp	Asp	Arg	
				155					160					165	
Ala	Gln	Pro	Asn	Gly	Gly	Lys	Arg	Glu	Asn	Cys	Val	Leu	Phe	Ser	
				170					175					180	
Gln	Ser	Ala	Gln	Gly	Lys	Trp	Ser	Asp	Glu	Ala	Cys	Arg	Ser	Ser	
				185					190					195	
Lys	Arg	Tyr	Ile	Cys	Glu	Phe	Thr	Ile	Pro	Lys					
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<210> 277

<211> 1778

<212> DNA

<213> Homo Sapien

<400> 277

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<210> 278

<211> 294

<212> PRT

<213> Homo Sapien

<400> 278

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Ser	Tyr	Leu	Trp	Leu	Lys	Phe	Ser	Leu	Ile	Ile	Tyr	Ser	Thr	Val
				20					25					30

Phe	Trp	Leu	Ile	Gly	Ala	Leu	Val	Leu	Ser	Val	Gly	Ile	Tyr	Ala
				35					40					45

Glu	Val	Glu	Arg	Gln	Lys	Tyr	Lys	Thr	Leu	Glu	Ser	Ala	Phe	Leu
				50					55					60

Ala	Pro	Ala	Ile	Ile	Leu	Ile	Leu	Leu	Gly	Val	Val	Met	Phe	Met
				65					70					75

Val	Ser	Phe	Ile	Gly	Val	Leu	Ala	Ser	Leu	Arg	Asp	Asn	Leu	Tyr
				80					85					90

Leu	Leu	Gln	Ala	Phe	Met	Tyr	Ile	Leu	Gly	Ile	Cys	Leu	Ile	Met
				95					100					105

Glu	Leu	Ile	Gly	Gly	Val	Val	Ala	Leu	Thr	Phe	Arg	Asn	Gln	Thr
				110					115					120

Ile	Asp	Phe	Leu	Asn	Asp	Asn	Ile	Arg	Arg	Gly	Ile	Glu	Asn	Tyr
				125					130					135

Tyr	Asp	Asp	Leu	Asp	Phe	Lys	Asn	Ile	Met	Asp	Phe	Val	Gln	Lys
				140					145					150

Lys	Phe	Lys	Cys	Cys	Gly	Gly	Glu	Asp	Tyr	Arg	Asp	Trp	Ser	Lys
				155					160					165

Asn	Gln	Tyr	His	Asp	Cys	Ser	Ala	Pro	Gly	Pro	Leu	Ala	Cys	Gly
				170					175					180

Val	Pro	Tyr	Thr	Cys	Cys	Ile	Arg	Asn	Thr	Thr	Glu	Val	Val	Asn
				185					190					195

Thr	Met	Cys	Gly	Tyr	Lys	Thr	Ile	Asp	Lys	Glu	Arg	Phe	Ser	Val
				200					205					210

Gln	Asp	Val	Ile	Tyr	Val	Arg	Gly	Cys	Thr	Asn	Ala	Val	Ile	Ile
				215					220					225

Trp	Phe	Met	Asp	Asn	Tyr	Thr	Ile	Met	Ala	Cys	Ile	Leu	Leu	Gly
				230					235					240

Ile	Leu	Leu	Pro	Gln	Phe	Leu	Gly	Val	Leu	Leu	Thr	Leu	Leu	Tyr
				245					250					255
Ile	Thr	Arg	Val	Glu	Asp	Ile	Ile	Met	Glu	His	Ser	Val	Thr	Asp
				260					265					270
Gly	Leu	Leu	Gly	Pro	Gly	Ala	Lys	Pro	Ser	Val	Glu	Ala	Ala	Gly
				275					280					285
Thr	Gly	Cys	Cys	Leu	Cys	Tyr	Pro	Asn						
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<210> 279

<211> 1636

<212> DNA

<213> Homo Sapien

<400> 279

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<210> 280

<211> 484

<212> PRT

<213> Homo Sapien

<400> 280

Met	Ala	Gly	Pro	Trp	Thr	Phe	Thr	Leu	Leu	Cys	Gly	Leu	Leu	Ala
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Ala	Thr	Leu	Ile	Gln	Ala	Thr	Leu	Ser	Pro	Thr	Ala	Val	Leu	Ile
			20						25					30
Leu	Gly	Pro	Lys	Val	Ile	Lys	Glu	Lys	Leu	Thr	Gln	Glu	Leu	Lys
			35						40					45
Asp	His	Asn	Ala	Thr	Ser	Ile	Leu	Gln	Gln	Leu	Pro	Leu	Leu	Ser
			50						55					60
Ala	Met	Arg	Glu	Lys	Pro	Ala	Gly	Gly	Ile	Pro	Val	Leu	Gly	Ser
			65						70					75
Leu	Val	Asn	Thr	Val	Leu	Lys	His	Ile	Ile	Trp	Leu	Lys	Val	Ile
			80						85					90
Thr	Ala	Asn	Ile	Leu	Gln	Leu	Gln	Val	Lys	Pro	Ser	Ala	Asn	Asp
			95						100					105
Gln	Glu	Leu	Leu	Val	Lys	Ile	Pro	Leu	Asp	Met	Val	Ala	Gly	Phe
			110						115					120
Asn	Thr	Pro	Leu	Val	Lys	Thr	Ile	Val	Glu	Phe	His	Met	Thr	Thr
			125						130					135

Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro	140	145	150
Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu	155	160	165
Arg Ile Gln Leu Leu Tyr Lys Leu Ser Phe Leu Val Asn Ala Leu	170	175	180
Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu	185	190	195
Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly	200	205	210
Met Tyr Ala Asp Leu Leu Gln Leu Val Lys Val Pro Ile Ser Leu	215	220	225
Ser Ile Asp Arg Leu Glu Phe Asp Leu Leu Tyr Pro Ala Ile Lys	230	235	240
Gly Asp Thr Ile Gln Leu Tyr Leu Gly Ala Lys Leu Leu Asp Ser	245	250	255
Gln Gly Lys Val Thr Lys Trp Phe Asn Asn Ser Ala Ala Ser Leu	260	265	270
Thr Met Pro Thr Leu Asp Asn Ile Pro Phe Ser Leu Ile Val Ser	275	280	285
Gln Asp Val Val Lys Ala Ala Val Ala Ala Val Leu Ser Pro Glu	290	295	300
Glu Phe Met Val Leu Leu Asp Ser Val Leu Pro Glu Ser Ala His	305	310	315
Arg Leu Lys Ser Ser Ile Gly Leu Ile Asn Glu Lys Ala Ala Asp	320	325	330
Lys Leu Gly Ser Thr Gln Ile Val Lys Ile Leu Thr Gln Asp Thr	335	340	345
Pro Glu Phe Phe Ile Asp Gln Gly His Ala Lys Val Ala Gln Leu	350	355	360
Ile Val Leu Glu Val Phe Pro Ser Ser Glu Ala Leu Arg Pro Leu	365	370	375
Phe Thr Leu Gly Ile Glu Ala Ser Ser Glu Ala Gln Phe Tyr Thr	380	385	390
Lys Gly Asp Gln Leu Ile Leu Asn Leu Asn Asn Ile Ser Ser Asp	395	400	405
Arg Ile Gln Leu Met Asn Ser Gly Ile Gly Trp Phe Gln Pro Asp	410	415	420
Val Leu Lys Asn Ile Ile Thr Glu Ile Ile His Ser Ile Leu Leu			

20250320 14:30:00

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Pro	Asn	Gln	Asn	Gly	Lys	Leu	Arg	Ser	Gly	Val	Pro	Val	Ser	Leu			
				440					445					450			
Val	Lys	Ala	Leu	Gly	Phe	Glu	Ala	Ala	Glu	Ser	Ser	Leu	Thr	Lys			
				455					460					465			
Asp	Ala	Leu	Val	Leu	Thr	Pro	Ala	Ser	Leu	Trp	Lys	Pro	Ser	Ser			
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<210> 281
<211> 1732
<212> DNA
<213> Homo Sapien

<400> 281
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<210> 282
<211> 451
<212> PRT
<213> Homo Sapien

<400> 282
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Leu Leu Trp Phe Pro Leu Asp Ser His Ala Arg Ala Arg Pro Asp
20 25 30
Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser
35 40 45
Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg
50 55 60
Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His
65 70 75
Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln
80 85 90
Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg
95 100 105

Ala	Pro	Pro	Lys	Ser	Cys	Gln	His	Asn	Gly	Thr	Met	Tyr	Gln	His
				110					115					120
Gly	Glu	Ile	Phe	Ser	Ala	His	Glu	Leu	Phe	Pro	Ser	Arg	Leu	Pro
				125					130					135
Asn	Gln	Cys	Val	Leu	Cys	Ser	Cys	Thr	Glu	Gly	Gln	Ile	Tyr	Cys
				140					145					150
Gly	Leu	Thr	Thr	Cys	Pro	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Leu	Pro
				155					160					165
Leu	Pro	Asp	Ser	Cys	Cys	Gln	Ala	Cys	Lys	Asp	Glu	Ala	Ser	Glu
				170					175					180
Gln	Ser	Asp	Glu	Glu	Asp	Ser	Val	Gln	Ser	Leu	His	Gly	Val	Arg
				185					190					195
His	Pro	Gln	Asp	Pro	Cys	Ser	Ser	Asp	Ala	Gly	Arg	Lys	Arg	Gly
				200					205					210
Pro	Gly	Thr	Pro	Ala	Pro	Thr	Gly	Leu	Ser	Ala	Pro	Leu	Ser	Phe
				215					220					225
Ile	Pro	Arg	His	Phe	Arg	Pro	Lys	Gly	Ala	Gly	Ser	Thr	Thr	Val
				230					235					240
Lys	Ile	Val	Leu	Lys	Glu	Lys	His	Lys	Lys	Ala	Cys	Val	His	Gly
				245					250					255
Gly	Lys	Thr	Tyr	Ser	His	Gly	Glu	Val	Trp	His	Pro	Ala	Phe	Arg
				260					265					270
Ala	Phe	Gly	Pro	Leu	Pro	Cys	Ile	Leu	Cys	Thr	Cys	Glu	Asp	Gly
				275					280					285
Arg	Gln	Asp	Cys	Gln	Arg	Val	Thr	Cys	Pro	Thr	Glu	Tyr	Pro	Cys
				290					295					300
Arg	His	Pro	Glu	Lys	Val	Ala	Gly	Lys	Cys	Cys	Lys	Ile	Cys	Pro
				305					310					315
Glu	Asp	Lys	Ala	Asp	Pro	Gly	His	Ser	Glu	Ile	Ser	Ser	Thr	Arg
				320					325					330
Cys	Pro	Lys	Ala	Pro	Gly	Arg	Val	Leu	Val	His	Thr	Ser	Val	Ser
				335					340					345
Pro	Ser	Pro	Asp	Asn	Leu	Arg	Arg	Phe	Ala	Leu	Glu	His	Glu	Ala
				350					355					360
Ser	Asp	Leu	Val	Glu	Ile	Tyr	Leu	Trp	Lys	Leu	Val	Lys	Asp	Glu
				365					370					375
Glu	Thr	Glu	Ala	Gln	Arg	Gly	Glu	Val	Pro	Gly	Pro	Arg	Pro	His
				380					385					390
Ser	Gln	Asn	Leu	Pro	Leu	Asp	Ser	Asp	Gln	Glu	Ser	Gln	Glu	Ala

	395		400		405
Arg Leu Pro Glu Arg Gly Thr Ala Leu Pro Thr Ala Arg Trp Pro					
	410		415		420
Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala					
	425		430		435
Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys					
	440		445		450

Thr

<210> 283
 <211> 2294
 <212> DNA
 <213> Homo Sapien

<400> 283
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 ggtcggattg caacgaggag aagatgactg accaaccgac tggctgaatg 100
 aatgaatggc ggagccgagc gcgccatgag gagcctgccg agcctgggcg 150
 gcctcgccct gttgtgtgc gccgcccgcg ccgcccgcgt cgcctcagcc 200
 gcctcggcgg ggaatgtcac cgggtggcggc ggggcccgcg ggcaggtgga 250
 cgcgtcgccg ggccccgggt tgcggggcga gccagccac cccttccta 300
 gggcgacggc tcccacggcc caggccccga ggaccgggac cccgcgcgcc 350
 accgtccacc gaccctggc tgcgacttct ccagcccagt ccccgagac 400
 caccctctt tgggcgactg ctggaccctc ttccaccacc ttccaggcgc 450
 cgctcggccc ctgcgcgacc acccctccgg cggcggaacg cacttcgacc 500
 acctctcagg cgccgaccag acccgcgccg accacccttt cgacgaccac 550
 tggcccggcg ccgaccaccc ctgtagegac caccgtaccg gcgcccacga 600
 ctccccggac ccgaccccc gatctcccca gcagcagcaa cagcagcgtc 650
 ctccccaccc cacctgccac cgaggcccc tcttcgcctc ctccagagta 700
 tgtatgtaac tgctctgtgg ttggaagcct gaatgtgaat cgctgcaacc 750
 agaccacagg gcagtgtgag tgcgggccag gttatcaggg gcttcactgt 800
 gaaacctgca aagagggcct ttacctaaat tacacttctg ggctctgtca 850
 gccatgtgac tgtagtcac atggagctct cagcataccg tgcaacaggt 900
 aagcaacaga ggtggaact gaagtttatt ttatttttagc aagggaacaa 950

<400> 284

Met	Arg	Ser	Leu	Pro	Ser	Leu	Gly	Gly	Leu	Ala	Leu	Leu	Cys	Cys	1	5	10	15
Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala	Ser	Ala	Ala	Ser	Ala	Gly	Asn	20	25	30	
Val	Thr	Gly	Gly	Gly	Gly	Ala	Ala	Gly	Gln	Val	Asp	Ala	Ser	Pro	35	40	45	
Gly	Pro	Gly	Leu	Arg	Gly	Glu	Pro	Ser	His	Pro	Phe	Pro	Arg	Ala	50	55	60	
Thr	Ala	Pro	Thr	Ala	Gln	Ala	Pro	Arg	Thr	Gly	Pro	Pro	Arg	Ala	65	70	75	
Thr	Val	His	Arg	Pro	Leu	Ala	Ala	Thr	Ser	Pro	Ala	Gln	Ser	Pro	80	85	90	
Glu	Thr	Thr	Pro	Leu	Trp	Ala	Thr	Ala	Gly	Pro	Ser	Ser	Thr	Thr	95	100	105	
Phe	Gln	Ala	Pro	Leu	Gly	Pro	Ser	Pro	Thr	Thr	Pro	Pro	Ala	Ala	110	115	120	
Glu	Arg	Thr	Ser	Thr	Thr	Ser	Gln	Ala	Pro	Thr	Arg	Pro	Ala	Pro	125	130	135	
Thr	Thr	Leu	Ser	Thr	Thr	Thr	Gly	Pro	Ala	Pro	Thr	Thr	Pro	Val	140	145	150	
Ala	Thr	Thr	Val	Pro	Ala	Pro	Thr	Thr	Pro	Arg	Thr	Pro	Thr	Pro	155	160	165	
Asp	Leu	Pro	Ser	Ser	Ser	Asn	Ser	Ser	Val	Leu	Pro	Thr	Pro	Pro	170	175	180	
Ala	Thr	Glu	Ala	Pro	Ser	Ser	Pro	Pro	Pro	Glu	Tyr	Val	Cys	Asn	185	190	195	
Cys	Ser	Val	Val	Gly	Ser	Leu	Asn	Val	Asn	Arg	Cys	Asn	Gln	Thr	200	205	210	
Thr	Gly	Gln	Cys	Glu	Cys	Arg	Pro	Gly	Tyr	Gln	Gly	Leu	His	Cys	215	220	225	
Glu	Thr	Cys	Lys	Glu	Gly	Phe	Tyr	Leu	Asn	Tyr	Thr	Ser	Gly	Leu	230	235	240	
Cys	Gln	Pro	Cys	Asp	Cys	Ser	Pro	His	Gly	Ala	Leu	Ser	Ile	Pro	245	250	255	
Cys	Asn	Arg																

<210> 285

<211> 1665

<212> DNA

<213> Homo Sapien

<400> 285

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gtaaactgct gacgatgcag agttccgtga cggcgcagga aggcctgtgt 150
gtccatgtgc cctgctcctt ctccacccc tcgcatggct ggattttacc 200
tggcccagta gttcatggct actgggttcg ggaaggggcc aatacagacc 250
aggatgctcc agtggccaca aacaaccag ctccggcagt gtgggaggag 300
actcgggacc gattccacct ccttggggac ccacatacca agaattgcac 350
cctgagcatc agagatgcca gaagaagtga tgcggggaga tacttctttc 400
gtatggagaa aggaagtata aaatggaatt ataaacatca ccggtctctt 450
gtgaatgtga cagccttgac ccacaggccc aacatcctca tcccaggcac 500
cctggagtcc ggctgcccc agaatctgac ctgctctgtg cctgggcct 550
gtgagcaggg gacacccct atgatctcct ggataggac ctccgtgtcc 600
cccctggacc cctccaccac ccgctcctcg gtgctcacc tcatcccaca 650
gccccaggac catggcacca gcctcacctg tcaggtgacc ttccctgggg 700
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cagaacttga ccatgactgt cttccaagga gacggcacag tatccacagt 800
cttgggaaat ggctcatctc tgtcactccc agagggccag tctctgcgcc 850
tggctctgtg agttgatgca gttgacagca atccccctgc caggctgagc 900
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acgggcatag aggatgcaaa cgctgtcagg ggttcagcct ctcaggggcc 1250
cctgactgaa ccttgggcag aagacagtcc ccagaccag cctccccag 1300
cttctgcccg ctctcagtg ggggaaggag agctccagta tgcattctc 1350
agcttcocaga tggatgaagc ttgggactcg cggggacagg aggcactga 1400

caccgagtac tcggagatca agatccacag atgagaaaact gcagagactc 1450
 accctgattg agggatcaca gcccctccag gcaagggaga agtcagaggc 1500
 tgattcttgt agaattaaca gccctcaacg tgatgagcta tgataacact 1550
 atgaattatg tgcagagtga aaagcacaca ggctttagag tcaaagtatc 1600
 tcaaacctga atccacactg tgccttcctt tttatttttt taactaaaag 1650
 acagacaaat tccta 1665

<210> 286

<211> 463

<212> PRT

<213> Homo Sapien

<400> 286

Met	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Leu	Trp	Gly	Arg	Glu	Arg	Ala	1	5	10	15
Glu	Gly	Gln	Thr	Ser	Lys	Leu	Leu	Thr	Met	Gln	Ser	Ser	Val	Thr	20	25	30	
Val	Gln	Glu	Gly	Leu	Cys	Val	His	Val	Pro	Cys	Ser	Phe	Ser	Tyr	35	40	45	
Pro	Ser	His	Gly	Trp	Ile	Tyr	Pro	Gly	Pro	Val	Val	His	Gly	Tyr	50	55	60	
Trp	Phe	Arg	Glu	Gly	Ala	Asn	Thr	Asp	Gln	Asp	Ala	Pro	Val	Ala	65	70	75	
Thr	Asn	Asn	Pro	Ala	Arg	Ala	Val	Trp	Glu	Glu	Thr	Arg	Asp	Arg	80	85	90	
Phe	His	Leu	Leu	Gly	Asp	Pro	His	Thr	Lys	Asn	Cys	Thr	Leu	Ser	95	100	105	
Ile	Arg	Asp	Ala	Arg	Arg	Ser	Asp	Ala	Gly	Arg	Tyr	Phe	Phe	Arg	110	115	120	
Met	Glu	Lys	Gly	Ser	Ile	Lys	Trp	Asn	Tyr	Lys	His	His	Arg	Leu	125	130	135	
Ser	Val	Asn	Val	Thr	Ala	Leu	Thr	His	Arg	Pro	Asn	Ile	Leu	Ile	140	145	150	
Pro	Gly	Thr	Leu	Glu	Ser	Gly	Cys	Pro	Gln	Asn	Leu	Thr	Cys	Ser	155	160	165	
Val	Pro	Trp	Ala	Cys	Glu	Gln	Gly	Thr	Pro	Pro	Met	Ile	Ser	Trp	170	175	180	
Ile	Gly	Thr	Ser	Val	Ser	Pro	Leu	Asp	Pro	Ser	Thr	Thr	Arg	Ser	185	190	195	
Ser	Val	Leu	Thr	Leu	Ile	Pro	Gln	Pro	Gln	Asp	His	Gly	Thr	Ser				

Leu Thr Cys Gln	Val Thr Phe Pro Gly	Ala Ser Val Thr Thr	Asn
215		220	225
Lys Thr Val His	Leu Asn Val Ser Tyr	Pro Pro Gln Asn Leu	Thr
230		235	240
Met Thr Val Phe	Gln Gly Asp Gly Thr	Val Ser Thr Val Leu	Gly
245		250	255
Asn Gly Ser Ser	Leu Ser Leu Pro Glu	Gly Gln Ser Leu Arg	Leu
260		265	270
Val Cys Ala Val	Asp Ala Val Asp Ser	Asn Pro Pro Ala Arg	Leu
275		280	285
Ser Leu Ser Trp	Arg Gly Leu Thr Leu	Cys Pro Ser Gln Pro	Ser
290		295	300
Asn Pro Gly Val	Leu Glu Leu Pro Trp	Val His Leu Arg Asp	Ala
305		310	315
Ala Glu Phe Thr	Cys Arg Ala Gln Asn	Pro Leu Gly Ser Gln	Gln
320		325	330
Val Tyr Leu Asn	Val Ser Leu Gln Ser	Lys Ala Thr Ser Gly	Val
335		340	345
Thr Gln Gly Val	Val Gly Gly Ala Gly	Ala Thr Ala Leu Val	Phe
350		355	360
Leu Ser Phe Cys	Val Ile Phe Val Val	Val Arg Ser Cys Arg	Lys
365		370	375
Lys Ser Ala Arg	Pro Ala Ala Gly Val	Gly Asp Thr Gly Ile	Glu
380		385	390
Asp Ala Asn Ala	Val Arg Gly Ser Ala	Ser Gln Gly Pro Leu	Thr
395		400	405
Glu Pro Trp Ala	Glu Asp Ser Pro Pro	Asp Gln Pro Pro Pro	Ala
410		415	420
Ser Ala Arg Ser	Ser Val Gly Glu Gly	Glu Leu Gln Tyr Ala	Ser
425		430	435
Leu Ser Phe Gln	Met Val Lys Pro Trp	Asp Ser Arg Gly Gln	Glu
440		445	450
Ala Thr Asp Thr	Glu Tyr Ser Glu Ile	Lys Ile His Arg	
455		460	

<210> 287
 <211> 2210
 <212> DNA
 <213> Homo Sapien

<400> 287
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atcggcgctt tcaccctcct cctcttcagt ctgctagtgt caccaccac 200
ctgcaaggtc caggagcagc caccggcgat ccccgaggcc ctggcctggc 250
cactccacc caccgcccc gccccggccc cgtgccatgc caacacctct 300
atggtcacc acccgactt cgccacgcag ccgcagcacg ttcagaactt 350
cctcctgtac agacactgcc gccactttcc cctgctgcag gacgtgcccc 400
cctctaagtg cgcgcagccg gtcttccctgc tgctggtgat caagtccctc 450
cctagcaact atgtgcgccg cgagctgctg cggcgcacgt ggggcccgcga 500
gcgcaaggta cggggtttgc agctgcgcct cctcttccctg gtgggcacag 550
cctccaacc gcacgaggcc cgcaaggcca accggctgct ggagctggag 600
gcacagactc acggagacat cctgcagtgg gacttccacg actccttctt 650
caacctcacg ctcaagcagg tcctgttctt acagtggcag gagacaaggt 700
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gcaagtacta tgtgccagag gtggtgactc agaatgagcg gtaccacccc 900
tattgtgggg gtggtggctt cttgctgtcc cgcttcacgg ccgctgccct 950
gcgcctgct gcccatgtct tggacatctt cccattgat gatgtcttcc 1000
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atccgcacgt ctggcgtgcg ggctccatcg caacacctgt cctcctttga 1100
cccctgcttc taccgagacc tgetgctggg gcaccgcttc ctaccttatg 1150
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aatcagacac agatctactg agtcagcatc agggccccca gcctctgggc 1250
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catcttcttt ttgtggctgc taatggcaga agtgccctgtg ctagagttcc 1500
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tcacctactc acagacggga tgctaagcag tgcacctgca gtggtttaat 1600
ggcagataag ctccgtctgc agttccaggc cagccagaaa ctctgtgtc 1650
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aagttgtgag agctcagagt ttctggggtc ctcattagga gccccatcc 1900
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tacgggggga ccgggtgagc cagtgacccc ctgcagcccc cagcttcagg 2100
cctcagtgtc tgccagtcaa gcttcacagg cattgtgatg gggcagcctt 2150
ggggaatata aaattttgtg aagaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2200
aaaaaaaaa 2210

<210> 288
<211> 372
<212> PRT
<213> Homo Sapien

<400> 288
Met Lys Tyr Leu Arg His Arg Arg Pro Asn Ala Thr Leu Ile Leu
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Ala Ile Gly Ala Phe Thr Leu Leu Leu Phe Ser Leu Leu Val Ser
20 25 30
Pro Pro Thr Cys Lys Val Gln Glu Gln Pro Pro Ala Ile Pro Glu
35 40 45
Ala Leu Ala Trp Pro Thr Pro Pro Thr Arg Pro Ala Pro Ala Pro
50 55 60
Cys His Ala Asn Thr Ser Met Val Thr His Pro Asp Phe Ala Thr
65 70 75
Gln Pro Gln His Val Gln Asn Phe Leu Leu Tyr Arg His Cys Arg
80 85 90
His Phe Pro Leu Leu Gln Asp Val Pro Pro Ser Lys Cys Ala Gln
95 100 105

Pro	Val	Phe	Leu	Leu	Leu	Val	Ile	Lys	Ser	Ser	Pro	Ser	Asn	Tyr	
			110						115					120	
Val	Arg	Arg	Glu	Leu	Leu	Arg	Arg	Thr	Trp	Gly	Arg	Glu	Arg	Lys	
			125						130					135	
Val	Arg	Gly	Leu	Gln	Leu	Arg	Leu	Leu	Phe	Leu	Val	Gly	Thr	Ala	
			140						145					150	
Ser	Asn	Pro	His	Glu	Ala	Arg	Lys	Val	Asn	Arg	Leu	Leu	Glu	Leu	
			155						160					165	
Glu	Ala	Gln	Thr	His	Gly	Asp	Ile	Leu	Gln	Trp	Asp	Phe	His	Asp	
			170						175					180	
Ser	Phe	Phe	Asn	Leu	Thr	Leu	Lys	Gln	Val	Leu	Phe	Leu	Gln	Trp	
			185						190					195	
Gln	Glu	Thr	Arg	Cys	Ala	Asn	Ala	Ser	Phe	Val	Leu	Asn	Gly	Asp	
			200						205					210	
Asp	Asp	Val	Phe	Ala	His	Thr	Asp	Asn	Met	Val	Phe	Tyr	Leu	Gln	
			215						220					225	
Asp	His	Asp	Pro	Gly	Arg	His	Leu	Phe	Val	Gly	Gln	Leu	Ile	Gln	
			230						235					240	
Asn	Val	Gly	Pro	Ile	Arg	Ala	Phe	Trp	Ser	Lys	Tyr	Tyr	Val	Pro	
			245						250					255	
Glu	Val	Val	Thr	Gln	Asn	Glu	Arg	Tyr	Pro	Pro	Tyr	Cys	Gly	Gly	
			260						265					270	
Gly	Gly	Phe	Leu	Leu	Ser	Arg	Phe	Thr	Ala	Ala	Ala	Leu	Arg	Arg	
			275						280					285	
Ala	Ala	His	Val	Leu	Asp	Ile	Phe	Pro	Ile	Asp	Asp	Val	Phe	Leu	
			290						295					300	
Gly	Met	Cys	Leu	Glu	Leu	Glu	Gly	Leu	Lys	Pro	Ala	Ser	His	Ser	
			305						310					315	
Gly	Ile	Arg	Thr	Ser	Gly	Val	Arg	Ala	Pro	Ser	Gln	His	Leu	Ser	
			320						325					330	
Ser	Phe	Asp	Pro	Cys	Phe	Tyr	Arg	Asp	Leu	Leu	Leu	Val	His	Arg	
			335						340					345	
Phe	Leu	Pro	Tyr	Glu	Met	Leu	Leu	Met	Trp	Asp	Ala	Leu	Asn	Gln	
			350						355					360	
Pro	Asn	Leu	Thr	Cys	Gly	Asn	Gln	Thr	Gln	Ile	Tyr				
			365						370						

<210> 289

<211> 4842

<212> DNA

<213> Homo Sapien

<400> 289

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ggggtcggcg ccgcctgctg cgcgcgcctg gcgctggcct tggcgctggc 150
gagcgtcctg agtgggcctc cagccgtcgc ctgccccacc aagtgtacct 200
gctccgctgc cagcgtggac tgccacgggc tgggcctccg cgcggttctt 250
cggggcatcc cccgcaacgc tgagcgcctt gacctggaca gaaataatat 300
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ccttccagaa ttgcttttcc agagcacgcc gaagctcacc agactagatt 500
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<210> 290

<211> 1523

<212> PRT

<213> Homo Sapien

<400> 290

Met	Ala	Pro	Gly	Trp	Ala	Gly	Val	Gly	Ala	Ala	Val	Arg	Ala	Arg	1	5	10	15
Leu	Ala	Leu	Ala	Leu	Ala	Leu	Ala	Ser	Val	Leu	Ser	Gly	Pro	Pro	20	25	30	
Ala	Val	Ala	Cys	Pro	Thr	Lys	Cys	Thr	Cys	Ser	Ala	Ala	Ser	Val	35	40	45	
Asp	Cys	His	Gly	Leu	Gly	Leu	Arg	Ala	Val	Pro	Arg	Gly	Ile	Pro	50	55	60	
Arg	Asn	Ala	Glu	Arg	Leu	Asp	Leu	Asp	Arg	Asn	Asn	Ile	Thr	Arg	65	70	75	
Ile	Thr	Lys	Met	Asp	Phe	Ala	Gly	Leu	Lys	Asn	Leu	Arg	Val	Leu	80	85	90	
His	Leu	Glu	Asp	Asn	Gln	Val	Ser	Val	Ile	Glu	Arg	Gly	Ala	Phe	95	100	105	
Gln	Asp	Leu	Lys	Gln	Leu	Glu	Arg	Leu	Arg	Leu	Asn	Lys	Asn	Lys	110	115	120	
Leu	Gln	Val	Leu	Pro	Glu	Leu	Leu	Phe	Gln	Ser	Thr	Pro	Lys	Leu	125	130	135	
Thr	Arg	Leu	Asp	Leu	Ser	Glu	Asn	Gln	Ile	Gln	Gly	Ile	Pro	Arg	140	145	150	
Lys	Ala	Phe	Arg	Gly	Ile	Thr	Asp	Val	Lys	Asn	Leu	Gln	Leu	Asp	155	160	165	

Asn Asn His Ile Ser Cys Ile Glu Asp Gly Ala Phe Arg Ala Leu	170	175	180
Arg Asp Leu Glu Ile Leu Thr Leu Asn Asn Asn Ile Ser Arg	185	190	195
Ile Leu Val Thr Ser Phe Asn His Met Pro Lys Ile Arg Thr Leu	200	205	210
Arg Leu His Ser Asn His Leu Tyr Cys Asp Cys His Leu Ala Trp	215	220	225
Leu Ser Asp Trp Leu Arg Gln Arg Arg Thr Val Gly Gln Phe Thr	230	235	240
Leu Cys Met Ala Pro Val His Leu Arg Gly Phe Asn Val Ala Asp	245	250	255
Val Gln Lys Lys Glu Tyr Val Cys Pro Ala Pro His Ser Glu Pro	260	265	270
Pro Ser Cys Asn Ala Asn Ser Ile Ser Cys Pro Ser Pro Cys Thr	275	280	285
Cys Ser Asn Asn Ile Val Asp Cys Arg Gly Lys Gly Leu Met Glu	290	295	300
Ile Pro Ala Asn Leu Pro Glu Gly Ile Val Glu Ile Arg Leu Glu	305	310	315
Gln Asn Ser Ile Lys Ala Ile Pro Ala Gly Ala Phe Thr Gln Tyr	320	325	330
Lys Lys Leu Lys Arg Ile Asp Ile Ser Lys Asn Gln Ile Ser Asp	335	340	345
Ile Ala Pro Asp Ala Phe Gln Gly Leu Lys Ser Leu Thr Ser Leu	350	355	360
Val Leu Tyr Gly Asn Lys Ile Thr Glu Ile Ala Lys Gly Leu Phe	365	370	375
Asp Gly Leu Val Ser Leu Gln Leu Leu Leu Leu Asn Ala Asn Lys	380	385	390
Ile Asn Cys Leu Arg Val Asn Thr Phe Gln Asp Leu Gln Asn Leu	395	400	405
Asn Leu Leu Ser Leu Tyr Asp Asn Lys Leu Gln Thr Ile Ser Lys	410	415	420
Gly Leu Phe Ala Pro Leu Gln Ser Ile Gln Thr Leu His Leu Ala	425	430	435
Gln Asn Pro Phe Val Cys Asp Cys His Leu Lys Trp Leu Ala Asp	440	445	450
Tyr Leu Gln Asp Asn Pro Ile Glu Thr Ser Gly Ala Arg Cys Ser			

	455		460		465
Ser Pro Arg Arg	Leu Ala Asn Lys Arg	Ile Ser Gln Ile Lys Ser			
	470	475			480
Lys Lys Phe Arg	Cys Ser Gly Ser Glu Asp Tyr Arg Ser Arg Phe				
	485	490			495
Ser Ser Glu Cys	Phe Met Asp Leu Val Cys Pro Glu Lys Cys Arg				
	500	505			510
Cys Glu Gly Thr	Ile Val Asp Cys Ser Asn Gln Lys Leu Val Arg				
	515	520			525
Ile Pro Ser His	Leu Pro Glu Tyr Val Thr Asp Leu Arg Leu Asn				
	530	535			540
Asp Asn Glu Val	Ser Val Leu Glu Ala Thr Gly Ile Phe Lys Lys				
	545	550			555
Leu Pro Asn Leu	Arg Lys Ile Asn Leu Ser Asn Asn Lys Ile Lys				
	560	565			570
Glu Val Arg Glu	Gly Ala Phe Asp Gly Ala Ala Ser Val Gln Glu				
	575	580			585
Leu Met Leu Thr	Gly Asn Gln Leu Glu Thr Val His Gly Arg Val				
	590	595			600
Phe Arg Gly Leu	Ser Gly Leu Lys Thr Leu Met Leu Arg Ser Asn				
	605	610			615
Leu Ile Ser Cys	Val Ser Asn Asp Thr Phe Ala Gly Leu Ser Ser				
	620	625			630
Val Arg Leu Leu	Ser Leu Tyr Asp Asn Arg Ile Thr Thr Ile Thr				
	635	640			645
Pro Gly Ala Phe	Thr Thr Leu Val Ser Leu Ser Thr Ile Asn Leu				
	650	655			660
Leu Ser Asn Pro	Phe Asn Cys Asn Cys His Leu Ala Trp Leu Gly				
	665	670			675
Lys Trp Leu Arg	Lys Arg Arg Ile Val Ser Gly Asn Pro Arg Cys				
	680	685			690
Gln Lys Pro Phe	Phe Leu Lys Glu Ile Pro Ile Gln Asp Val Ala				
	695	700			705
Ile Gln Asp Phe	Thr Cys Asp Gly Asn Glu Glu Ser Ser Cys Gln				
	710	715			720
Leu Ser Pro Arg	Cys Pro Glu Gln Cys Thr Cys Met Glu Thr Val				
	725	730			735
Val Arg Cys Ser	Asn Lys Gly Leu Arg Ala Leu Pro Arg Gly Met				
	740	745			750

Pro Lys Asp Val Thr Glu Leu Tyr Leu Glu Gly Asn His Leu Thr	755	760	765
Ala Val Pro Arg Glu Leu Ser Ala Leu Arg His Leu Thr Leu Ile	770	775	780
Asp Leu Ser Asn Asn Ser Ile Ser Met Leu Thr Asn Tyr Thr Phe	785	790	795
Ser Asn Met Ser His Leu Ser Thr Leu Ile Leu Ser Tyr Asn Arg	800	805	810
Leu Arg Cys Ile Pro Val His Ala Phe Asn Gly Leu Arg Ser Leu	815	820	825
Arg Val Leu Thr Leu His Gly Asn Asp Ile Ser Ser Val Pro Glu	830	835	840
Gly Ser Phe Asn Asp Leu Thr Ser Leu Ser His Leu Ala Leu Gly	845	850	855
Thr Asn Pro Leu His Cys Asp Cys Ser Leu Arg Trp Leu Ser Glu	860	865	870
Trp Val Lys Ala Gly Tyr Lys Glu Pro Gly Ile Ala Arg Cys Ser	875	880	885
Ser Pro Glu Pro Met Ala Asp Arg Leu Leu Leu Thr Thr Pro Thr	890	895	900
His Arg Phe Gln Cys Lys Gly Pro Val Asp Ile Asn Ile Val Ala	905	910	915
Lys Cys Asn Ala Cys Leu Ser Ser Pro Cys Lys Asn Asn Gly Thr	920	925	930
Cys Thr Gln Asp Pro Val Glu Leu Tyr Arg Cys Ala Cys Pro Tyr	935	940	945
Ser Tyr Lys Gly Lys Asp Cys Thr Val Pro Ile Asn Thr Cys Ile	950	955	960
Gln Asn Pro Cys Gln His Gly Gly Thr Cys His Leu Ser Asp Ser	965	970	975
His Lys Asp Gly Phe Ser Cys Ser Cys Pro Leu Gly Phe Glu Gly	980	985	990
Gln Arg Cys Glu Ile Asn Pro Asp Asp Cys Glu Asp Asn Asp Cys	995	1000	1005
Glu Asn Asn Ala Thr Cys Val Asp Gly Ile Asn Asn Tyr Val Cys	1010	1015	1020
Ile Cys Pro Pro Asn Tyr Thr Gly Glu Leu Cys Asp Glu Val Ile	1025	1030	1035
Asp His Cys Val Pro Glu Leu Asn Leu Cys Gln His Glu Ala Lys			

1040	1045	1050
Cys Ile Pro Leu Asp Lys Gly Phe Ser Cys Glu Cys Val Pro Gly		
1055	1060	1065
Tyr Ser Gly Lys Leu Cys Glu Thr Asp Asn Asp Asp Cys Val Ala		
1070	1075	1080
His Lys Cys Arg His Gly Ala Gln Cys Val Asp Thr Ile Asn Gly		
1085	1090	1095
Tyr Thr Cys Thr Cys Pro Gln Gly Phe Ser Gly Pro Phe Cys Glu		
1100	1105	1110
His Pro Pro Pro Met Val Leu Leu Gln Thr Ser Pro Cys Asp Gln		
1115	1120	1125
Tyr Glu Cys Gln Asn Gly Ala Gln Cys Ile Val Val Gln Gln Glu		
1130	1135	1140
Pro Thr Cys Arg Cys Pro Pro Gly Phe Ala Gly Pro Arg Cys Glu		
1145	1150	1155
Lys Leu Ile Thr Val Asn Phe Val Gly Lys Asp Ser Tyr Val Glu		
1160	1165	1170
Leu Ala Ser Ala Lys Val Arg Pro Gln Ala Asn Ile Ser Leu Gln		
1175	1180	1185
Val Ala Thr Asp Lys Asp Asn Gly Ile Leu Leu Tyr Lys Gly Asp		
1190	1195	1200
Asn Asp Pro Leu Ala Leu Glu Leu Tyr Gln Gly His Val Arg Leu		
1205	1210	1215
Val Tyr Asp Ser Leu Ser Ser Pro Pro Thr Thr Val Tyr Ser Val		
1220	1225	1230
Glu Thr Val Asn Asp Gly Gln Phe His Ser Val Glu Leu Val Thr		
1235	1240	1245
Leu Asn Gln Thr Leu Asn Leu Val Val Asp Lys Gly Thr Pro Lys		
1250	1255	1260
Ser Leu Gly Lys Leu Gln Lys Gln Pro Ala Val Gly Ile Asn Ser		
1265	1270	1275
Pro Leu Tyr Leu Gly Gly Ile Pro Thr Ser Thr Gly Leu Ser Ala		
1280	1285	1290
Leu Arg Gln Gly Thr Asp Arg Pro Leu Gly Gly Phe His Gly Cys		
1295	1300	1305
Ile His Glu Val Arg Ile Asn Asn Glu Leu Gln Asp Phe Lys Ala		
1310	1315	1320
Leu Pro Pro Gln Ser Leu Gly Val Ser Pro Gly Cys Lys Ser Cys		
1325	1330	1335

Thr Val Cys Lys His Gly Leu Cys Arg Ser Val Glu Lys Asp Ser
1340 1345 1350

Val Val Cys Glu Cys Arg Pro Gly Trp Thr Gly Pro Leu Cys Asp
1355 1360 1365

Gln Glu Ala Arg Asp Pro Cys Leu Gly His Arg Cys His His Gly
1370 1375 1380

Lys Cys Val Ala Thr Gly Thr Ser Tyr Met Cys Lys Cys Ala Glu
1385 1390 1395

Gly Tyr Gly Gly Asp Leu Cys Asp Asn Lys Asn Asp Ser Ala Asn
1400 1405 1410

Ala Cys Ser Ala Phe Lys Cys His His Gly Gln Cys His Ile Ser
1415 1420 1425

Asp Gln Gly Glu Pro Tyr Cys Leu Cys Gln Pro Gly Phe Ser Gly
1430 1435 1440

Glu His Cys Gln Gln Glu Asn Pro Cys Leu Gly Gln Val Val Arg
1445 1450 1455

Glu Val Ile Arg Arg Gln Lys Gly Tyr Ala Ser Cys Ala Thr Ala
1460 1465 1470

Ser Lys Val Pro Ile Met Glu Cys Arg Gly Gly Cys Gly Pro Gln
1475 1480 1485

Cys Cys Gln Pro Thr Arg Ser Lys Arg Arg Lys Tyr Val Phe Gln
1490 1495 1500

Cys Thr Asp Gly Ser Ser Phe Val Glu Glu Val Glu Arg His Leu
1505 1510 1515

Glu Cys Gly Cys Leu Ala Cys Ser
1520

<210> 291

<211> 753

<212> DNA

<213> Homo Sapien

<400> 291

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gtttcttccg cagactcaac tgagaagtca gcctctgggg caggcaccag 100

gaatctgcct ttctcattct gtctccggca ggctttgagg atgaaggctg 150

cgggcattct gaccctcatt ggctgcctgg tcacaggcgc cgagtccaaa 200

atctacactc gttgcaaact ggcaaaaata ttctcgaggg ctggcctgga 250

caattactgg ggcttcagcc ttggaaactg gatctgcatg gcatattatg 300

agagcgggcta caacaccaca gccccgacgg tcttgatga cggcagcatc 350

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gtc 753

<210> 292
<211> 148
<212> PRT
<213> Homo Sapien

<400> 292
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Gly Ala Glu Ser Lys Ile Tyr Thr Arg Cys Lys Leu Ala Lys Ile
20 25 30
Phe Ser Arg Ala Gly Leu Asp Asn Tyr Trp Gly Phe Ser Leu Gly
35 40 45
Asn Trp Ile Cys Met Ala Tyr Tyr Glu Ser Gly Tyr Asn Thr Thr
50 55 60
Ala Pro Thr Val Leu Asp Asp Gly Ser Ile Asp Tyr Gly Ile Phe
65 70 75
Gln Ile Asn Ser Phe Ala Trp Cys Arg Arg Gly Lys Leu Lys Glu
80 85 90
Asn Asn His Cys His Val Ala Cys Ser Ala Leu Ile Thr Asp Asp
95 100 105
Leu Thr Asp Ala Ile Ile Cys Ala Arg Lys Ile Val Lys Glu Thr
110 115 120
Gln Gly Met Asn Tyr Trp Gln Gly Trp Lys Lys His Cys Glu Gly
125 130 135
Arg Asp Leu Ser Glu Trp Lys Lys Gly Cys Glu Val Ser
140 145

<210> 293
<211> 1176
<212> DNA
<213> Homo Sapien

<210> 295
 <211> 1648
 <212> DNA
 <213> Homo Sapien

<400> 295
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 tattaanaact tgtacatggc tccccattgg tttttggaga aaagttcaag 150
 ctttttaact tgggtgtctgc ctgtatccca gtgttcaggc tggctagacg 200
 gcggaagaag atcctatttt actgtcactt cccagatctg cttctcacca 250
 agagagattc ttttcttaaa cgactataca gggccccaat tgactggata 300
 gaggaataca ccacaggcat ggcagactgc atcttagtca acagccagtt 350
 cacagctgct gtttttaagg aacattcaa gtccctgtct cacatagacc 400
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 cctgaaaagc tggatgacct agtccccaag gggaaaaaat tcctgctgct 500
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 catctgatcg tggcaggtgg ttatgacgag agagtcctgg agaattgtga 650
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 tgtccctctg gaagccatgt acatgcagtg cccagtcatt gctgttaatt 850
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 ctttctata taccacacct ccctgtccac ttttcagaaa aacctgtct 1250

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 ataatgagag cagggctatt gtagttccca gattcaatcc accgaagtgt 1500
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 actgagatat aataaaaggt gtttatcata aaaaaaaaaa aaaaaaaaaa 1648

<210> 296

<211> 323

<212> PRT

<213> Homo Sapien

<400> 296

Met	Pro	Leu	Leu	Lys	Leu	Val	His	Gly	Ser	Pro	Leu	Val	Phe	Gly	1	5	10	15
Glu	Lys	Phe	Lys	Leu	Phe	Thr	Leu	Val	Ser	Ala	Cys	Ile	Pro	Val	20	25	30	
Phe	Arg	Leu	Ala	Arg	Arg	Arg	Lys	Lys	Ile	Leu	Phe	Tyr	Cys	His	35	40	45	
Phe	Pro	Asp	Leu	Leu	Leu	Thr	Lys	Arg	Asp	Ser	Phe	Leu	Lys	Arg	50	55	60	
Leu	Tyr	Arg	Ala	Pro	Ile	Asp	Trp	Ile	Glu	Glu	Tyr	Thr	Thr	Gly	65	70	75	
Met	Ala	Asp	Cys	Ile	Leu	Val	Asn	Ser	Gln	Phe	Thr	Ala	Ala	Val	80	85	90	
Phe	Lys	Glu	Thr	Phe	Lys	Ser	Leu	Ser	His	Ile	Asp	Pro	Asp	Val	95	100	105	
Leu	Tyr	Pro	Ser	Leu	Asn	Val	Thr	Ser	Phe	Asp	Ser	Val	Val	Pro	110	115	120	
Glu	Lys	Leu	Asp	Asp	Leu	Val	Pro	Lys	Gly	Lys	Lys	Phe	Leu	Leu	125	130	135	
Leu	Ser	Ile	Asn	Arg	Tyr	Glu	Arg	Lys	Lys	Asn	Leu	Thr	Leu	Ala	140	145	150	
Leu	Glu	Ala	Leu	Val	Gln	Leu	Arg	Gly	Arg	Leu	Thr	Ser	Gln	Asp	155	160	165	
Trp	Glu	Arg	Val	His	Leu	Ile	Val	Ala	Gly	Gly	Tyr	Asp	Glu	Arg	170	175	180	

Val Leu Glu Asn Val Glu His Tyr Gln Glu Leu Lys Lys Met Val
185 190 195

Gln Gln Ser Asp Leu Gly Gln Tyr Val Thr Phe Leu Arg Ser Phe
200 205 210

Ser Asp Lys Gln Lys Ile Ser Leu Leu His Ser Cys Thr Cys Val
215 220 225

Leu Tyr Thr Pro Ser Asn Glu His Phe Gly Ile Val Pro Leu Glu
230 235 240

Ala Met Tyr Met Gln Cys Pro Val Ile Ala Val Asn Ser Gly Gly
245 250 255

Pro Leu Glu Ser Ile Asp His Ser Val Thr Gly Phe Leu Cys Glu
260 265 270

Pro Asp Pro Val His Phe Ser Glu Ala Ile Glu Lys Phe Ile Arg
275 280 285

Glu Pro Ser Leu Lys Ala Thr Met Gly Leu Ala Gly Arg Ala Arg
290 295 300

Val Lys Glu Lys Phe Ser Pro Glu Ala Phe Thr Glu Gln Leu Tyr
305 310 315

Arg Tyr Val Thr Lys Leu Leu Val
320

<210> 297

<211> 1554

<212> DNA

<213> Homo Sapien

<400> 297

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ccaactgaag aaaaagatgg taatcttcca gatattgtga atagtggaag 200

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<210> 298

<211> 462

<212> PRT

<213> Homo Sapien

<400> 298

Met	Leu	Asp	Phe	Ala	Ile	Phe	Ala	Val	Thr	Phe	Leu	Leu	Ala	Leu
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Val	Gly	Ala	Val	Leu	Tyr	Leu	Tyr	Pro	Ala	Ser	Arg	Gln	Ala	Ala
			20						25					30

Gly	Ile	Pro	Gly	Ile	Thr	Pro	Thr	Glu	Glu	Lys	Asp	Gly	Asn	Leu
			35						40					45

Pro Asp Ile Val Asn Ser Gly Ser Leu His Glu Phe Leu Val Asn

Leu Gln Asp Ile Glu Gly Lys Ile Asp Arg Phe Ile Ile Pro Arg
350 355 360

Glu Thr Leu Val Leu Tyr Ala Leu Gly Val Val Leu Gln Asp Pro
365 370 375

Asn Thr Trp Pro Ser Pro His Lys Phe Asp Pro Asp Arg Phe Asp
380 385 390

Asp Glu Leu Val Met Lys Thr Phe Ser Ser Leu Gly Phe Ser Gly
395 400 405

Thr Gln Glu Cys Pro Glu Leu Arg Phe Ala Tyr Met Val Thr Thr
410 415 420

Val Leu Leu Ser Val Leu Val Lys Arg Leu His Leu Leu Ser Val
425 430 435

Glu Gly Gln Val Ile Glu Thr Lys Tyr Glu Leu Val Thr Ser Ser
440 445 450

Arg Glu Glu Ala Trp Ile Thr Val Ser Lys Arg Tyr
455 460

<210> 299
<211> 759
<212> DNA
<213> Homo Sapien

<400> 299
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aaaaaaaaa 759

<210> 300

<211> 140

<212> PRT

<213> Homo Sapien

<400> 300

Met	Gly	Arg	Val	Ser	Gly	Leu	Val	Pro	Ser	Arg	Phe	Leu	Thr	Leu
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Leu	Ala	His	Leu	Val	Val	Val	Ile	Thr	Leu	Phe	Trp	Ser	Arg	Asp
			20						25					30

Ser	Asn	Ile	Gln	Ala	Cys	Leu	Pro	Leu	Thr	Phe	Thr	Pro	Glu	Glu
			35						40					45

Tyr	Asp	Lys	Gln	Asp	Ile	Gln	Leu	Val	Ala	Ala	Leu	Ser	Val	Thr
			50						55					60

Leu	Gly	Leu	Phe	Ala	Val	Glu	Leu	Ala	Gly	Phe	Leu	Ser	Gly	Val
			65						70					75

Ser	Met	Phe	Asn	Ser	Thr	Gln	Ser	Leu	Ile	Ser	Ile	Gly	Ala	His
			80						85					90

Cys	Ser	Ala	Ser	Val	Ala	Leu	Ser	Phe	Phe	Ile	Phe	Glu	Arg	Trp
			95						100					105

Glu	Cys	Thr	Thr	Tyr	Trp	Tyr	Ile	Phe	Val	Phe	Cys	Ser	Ala	Leu
			110						115					120

Pro	Ala	Val	Thr	Glu	Met	Ala	Leu	Phe	Val	Thr	Val	Phe	Gly	Leu
			125						130					135

Lys	Lys	Lys	Pro	Phe
			140	

<210> 301

<211> 1871

<212> DNA

<213> Homo Sapien

<400> 301

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gcggggccac atctcaccta agtcccgcct catggccaat tccactctcc 250

tagggctgct ggccccgcct ggggaggctt ggggcattct tgggcagccc 300

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<210> 302
 <211> 252
 <212> PRT
 <213> Homo Sapien

<400> 302
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 Leu Tyr Leu Val Ile Cys Gly Gln Asp Asp Gly Pro Pro Gly Ser
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 Glu Asp Pro Glu Arg Asp Asp His Glu Gly Gln Pro Arg Pro Arg
 35 40 45
 Val Pro Arg Lys Arg Gly His Ile Ser Pro Lys Ser Arg Pro Met
 50 55 60
 Ala Asn Ser Thr Leu Leu Gly Leu Leu Ala Pro Pro Gly Glu Ala
 65 70 75
 Trp Gly Ile Leu Gly Gln Pro Pro Asn Arg Pro Asn His Ser Pro
 80 85 90
 Pro Pro Ser Ala Lys Val Lys Lys Ile Phe Gly Trp Gly Asp Phe
 95 100 105
 Tyr Ser Asn Ile Lys Thr Val Ala Leu Asn Leu Leu Val Thr Gly
 110 115 120
 Lys Ile Val Asp His Gly Asn Gly Thr Phe Ser Val His Phe Gln
 125 130 135
 His Asn Ala Thr Gly Gln Gly Asn Ile Ser Ile Ser Leu Val Pro
 140 145 150
 Pro Ser Lys Ala Val Glu Phe His Gln Glu Gln Gln Ile Phe Ile
 155 160 165
 Glu Ala Lys Ala Ser Lys Ile Phe Asn Cys Arg Met Glu Trp Glu
 170 175 180
 Lys Val Glu Arg Gly Arg Arg Thr Ser Leu Cys Thr His Asp Pro
 185 190 195
 Ala Lys Ile Cys Ser Arg Asp His Ala Gln Ser Ser Ala Thr Trp
 200 205 210
 Ser Cys Ser Gln Pro Phe Lys Val Val Cys Val Tyr Ile Ala Phe
 215 220 225
 Tyr Ser Thr Asp Tyr Arg Leu Val Gln Lys Val Cys Pro Asp Tyr

Pro Ala Leu Ala Leu Tyr Val Phe Thr Ile Ala Ile Glu Pro Leu
20 25 30

Arg Ile Ile Phe Leu Ile Ala Gly Ala Phe Phe Trp Leu Val Ser
35 40 45

Leu Leu Ile Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile
50 55 60

Asp Asn Lys Asp Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly
65 70 75

Ala Phe Val Ser Val Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr
80 85 90

Tyr Lys Leu Leu Lys Lys Ala Ser Glu Gly Leu Lys Ser Ile Asn
95 100 105

Pro Gly Glu Thr Ala Pro Ser Met Arg Leu Leu Ala Tyr Val Ser
110 115 120

Gly Leu Gly Phe Gly Ile Met Ser Gly Val Phe Ser Phe Val Asn
125 130 135

Thr Leu Ser Asp Ser Leu Gly Pro Gly Thr Val Gly Ile His Gly
140 145 150

Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala Phe Met Thr Leu Val
155 160 165

Ile Ile Leu Leu His Val Phe Trp Gly Ile Val Phe Phe Asp Gly
170 175 180

Cys Glu Lys Lys Lys Trp Gly Ile Leu Leu Ile Val Leu Leu Thr
185 190 195

His Leu Leu Val Ser Ala Gln Thr Phe Ile Ser Ser Tyr Tyr Gly
200 205 210

Ile Asn Leu Ala Ser Ala Phe Ile Ile Leu Val Leu Met Gly Thr
215 220 225

Trp Ala Phe Leu Ala Ala Gly Gly Ser Cys Arg Ser Leu Lys Leu
230 235 240

Cys Leu Leu Cys Gln Asp Lys Asn Phe Leu Leu Tyr Asn Gln Arg
245 250 255

Ser Arg

<210> 305

<211> 1073

<212> DNA

<213> Homo Sapien

<400> 305

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<210> 306
<211> 209
<212> PRT
<213> Homo Sapien

<400> 306
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Ser Leu Pro Gln Leu Lys Pro Ala Leu Gly Leu Pro Pro Thr Lys
20 25 30
Leu Ala Pro Asp Gln Gly Thr Leu Pro Asn Gln Gln Gln Ser Asn
35 40 45
Gln Val Phe Pro Ser Leu Ser Leu Ile Pro Leu Thr Gln Met Leu

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	380		385		390									
Phe	Leu	Leu	Pro	Ala	Asn	Gln	Ile	Ile	Pro	Thr	Ala	Glu	Glu	Thr
			395						400					405
Trp	Leu	Gly	Leu	Lys	Thr	Ile	Met	Glu	His	Val	Arg	Asp	Asn	Leu
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Tyr

<210> 309
 <211> 2436
 <212> DNA
 <213> Homo Sapien

<400> 309
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<210> 310
<211> 596

<212> PRT
 <213> Homo Sapien

<400> 310

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Ala	Asn	Thr	Gly	Ser	Ser	Val	Ile	Ser	Ser	Gly	Ala	Ser	Thr	Ala	35	40	45	
Thr	Asn	Ser	Gly	Ser	Ser	Val	Thr	Ser	Ser	Gly	Val	Ser	Thr	Ala	50	55	60	
Thr	Ile	Ser	Gly	Ser	Ser	Val	Thr	Ser	Asn	Gly	Val	Ser	Ile	Val	65	70	75	
Thr	Asn	Ser	Glu	Phe	His	Thr	Thr	Ser	Ser	Gly	Ile	Ser	Thr	Ala	80	85	90	
Thr	Asn	Ser	Glu	Phe	Ser	Thr	Ala	Ser	Ser	Gly	Ile	Ser	Ile	Ala	95	100	105	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	110	115	120	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Pro	Ser	Ser	Gly	Ala	Ser	Thr	Val	125	130	135	
Thr	Asn	Ser	Gly	Ser	Ser	Val	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	140	145	150	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Arg	Ala	Ser	Thr	Ala	155	160	165	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Leu	Ser	Ser	Gly	Ala	Ser	Thr	Ala	170	175	180	
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	185	190	195	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	200	205	210	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Arg	Ala	Ser	Thr	Ala	215	220	225	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	230	235	240	
Thr	Asn	Ser	Glu	Ser	Arg	Thr	Thr	Ser	Asn	Gly	Ala	Gly	Thr	Ala	245	250	255	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	260	265	270	

560	565	570
Arg Trp Ser Pro Asn Trp Phe Trp Arg	Arg Pro Val Ser Ser Ile	
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Ala Met Glu Met Ser Gly Arg Asn Ser Gly Pro		
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<210> 311
 <211> 4563
 <212> DNA
 <213> Homo Sapien

<220>
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 <223> unknown base

<400> 311
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<210> 312
 <211> 802
 <212> PRT
 <213> Homo Sapien

<400> 312
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 35 40 45
 Glu Gly Cys Arg Ser Gly Gln Ala Ala Ala Ser Gln Ala Gly Gly
 50 55 60
 Ala Arg Gly Asp Ala Arg Gly Ala Gln Leu Trp Pro Pro Gly Ser
 65 70 75
 Asp Pro Asp Gly Gly Pro Arg Asp Arg Asn Phe Leu Phe Val Gly
 80 85 90
 Val Met Thr Ala Gln Lys Tyr Leu Gln Thr Arg Ala Val Ala Ala
 95 100 105
 Tyr Arg Thr Trp Ser Lys Thr Ile Pro Gly Lys Val Gln Phe Phe
 110 115 120

Ser Ser Glu Gly	Ser Asp Thr Ser Val	Pro Ile Pro Val Val Pro	125	130	135
Leu Arg Gly Val	Asp Asp Ser Tyr Pro	Pro Gln Lys Lys Ser Phe	140	145	150
Met Met Leu Lys	Tyr Met His Asp His	Tyr Leu Asp Lys Tyr Glu	155	160	165
Trp Phe Met Arg	Ala Asp Asp Asp Val	Tyr Ile Lys Gly Asp Arg	170	175	180
Leu Glu Asn Phe	Leu Arg Ser Leu Asn	Ser Ser Glu Pro Leu Phe	185	190	195
Leu Gly Gln Thr	Gly Leu Gly Thr Thr	Glu Glu Met Gly Lys Leu	200	205	210
Ala Leu Glu Pro	Gly Glu Asn Phe Cys	Met Gly Gly Pro Gly Val	215	220	225
Ile Met Ser Arg	Glu Val Leu Arg Arg	Met Val Pro His Ile Gly	230	235	240
Lys Cys Leu Arg	Glu Met Tyr Thr Thr	His Glu Asp Val Glu Val	245	250	255
Gly Arg Cys Val	Arg Arg Phe Ala Gly	Val Gln Cys Val Trp Ser	260	265	270
Tyr Glu Met Arg	Gln Leu Phe Tyr Glu	Asn Tyr Glu Gln Asn Lys	275	280	285
Lys Gly Tyr Ile	Arg Asp Leu His Asn	Ser Lys Ile His Gln Ala	290	295	300
Ile Thr Leu His	Pro Asn Lys Asn Pro	Pro Tyr Gln Tyr Arg Leu	305	310	315
His Ser Tyr Met	Leu Ser Arg Lys Ile	Ser Glu Leu Arg His Arg	320	325	330
Thr Ile Gln Leu	His Arg Glu Ile Val	Leu Met Ser Lys Tyr Ser	335	340	345
Asn Thr Glu Ile	His Lys Glu Asp Leu	Gln Leu Gly Ile Pro Pro	350	355	360
Ser Phe Met Arg	Phe Gln Pro Arg Gln	Arg Glu Glu Ile Leu Glu	365	370	375
Trp Glu Phe Leu	Thr Gly Lys Tyr Leu	Tyr Ser Ala Val Asp Gly	380	385	390
Gln Pro Pro Arg	Arg Gly Met Asp Ser	Ala Gln Arg Glu Ala Leu	395	400	405
Asp Asp Ile Val	Met Gln Val Met Glu	Met Ile Asn Ala Asn Ala			

Val Gly Gly Phe Asp Val Ser Ile Gln Gly Trp Gly Leu Glu Asp
710 715 720

Val Asp Leu Phe Asn Lys Val Val Gln Ala Gly Leu Lys Thr Phe
725 730 735

Arg Ser Gln Glu Val Gly Val Val His Val His His Pro Val Phe
740 745 750

Cys Asp Pro Asn Leu Asp Pro Lys Gln Tyr Lys Met Cys Leu Gly
755 760 765

Ser Lys Ala Ser Thr Tyr Gly Ser Thr Gln Gln Leu Ala Glu Met
770 775 780

Trp Leu Glu Lys Asn Asp Pro Ser Tyr Ser Lys Ser Ser Asn Asn
785 790 795

Asn Gly Ser Val Arg Thr Ala
800

<210> 313
<211> 1728
<212> DNA
<213> Homo Sapien

<400> 313
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attattaaac aatcatcagg cttttaaa 1728

<210> 314

<211> 414

<212> PRT

<213> Homo Sapien

<400> 314

Met	His	Ser	Arg	Gly	Arg	Glu	Ile	Val	Val	Leu	Leu	Asn	Pro	Trp
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Ser	Ile	Asn	Glu	Ala	Val	Ser	Ser	Tyr	Cys	Thr	Tyr	Phe	Ile	Lys
				20					25					30
Gln	Asp	Ser	Lys	Ser	Phe	Gly	Ile	Met	Val	Ser	Trp	Lys	Gly	Ile
				35					40					45
Tyr	Phe	Ile	Leu	Thr	Leu	Phe	Trp	Gly	Ser	Phe	Phe	Gly	Ser	Ile
				50					55					60
Phe	Met	Leu	Ser	Pro	Phe	Leu	Pro	Leu	Met	Phe	Val	Asn	Pro	Ser
				65					70					75

Trp	Tyr	Arg	Trp	Ile	Asn	Asn	Arg	Leu	Val	Ala	Thr	Trp	Leu	Thr	80	85	90
Leu	Pro	Val	Ala	Leu	Leu	Glu	Thr	Met	Phe	Gly	Val	Lys	Val	Ile	95	100	105
Ile	Thr	Gly	Asp	Ala	Phe	Val	Pro	Gly	Glu	Arg	Ser	Val	Ile	Ile	110	115	120
Met	Asn	His	Arg	Thr	Arg	Met	Asp	Trp	Met	Phe	Leu	Trp	Asn	Cys	125	130	135
Leu	Met	Arg	Tyr	Ser	Tyr	Leu	Arg	Leu	Glu	Lys	Ile	Cys	Leu	Lys	140	145	150
Ala	Ser	Leu	Lys	Gly	Val	Pro	Gly	Phe	Gly	Trp	Ala	Met	Gln	Ala	155	160	165
Ala	Ala	Tyr	Ile	Phe	Ile	His	Arg	Lys	Trp	Lys	Asp	Asp	Lys	Ser	170	175	180
His	Phe	Glu	Asp	Met	Ile	Asp	Tyr	Phe	Cys	Asp	Ile	His	Glu	Pro	185	190	195
Leu	Gln	Leu	Leu	Ile	Phe	Pro	Glu	Gly	Thr	Asp	Leu	Thr	Glu	Asn	200	205	210
Ser	Lys	Ser	Arg	Ser	Asn	Ala	Phe	Ala	Glu	Lys	Asn	Gly	Leu	Gln	215	220	225
Lys	Tyr	Glu	Tyr	Val	Leu	His	Pro	Arg	Thr	Thr	Gly	Phe	Thr	Phe	230	235	240
Val	Val	Asp	Arg	Leu	Arg	Glu	Gly	Lys	Asn	Leu	Asp	Ala	Val	His	245	250	255
Asp	Ile	Thr	Val	Ala	Tyr	Pro	His	Asn	Ile	Pro	Gln	Ser	Glu	Lys	260	265	270
His	Leu	Leu	Gln	Gly	Asp	Phe	Pro	Arg	Glu	Ile	His	Phe	His	Val	275	280	285
His	Arg	Tyr	Pro	Ile	Asp	Thr	Leu	Pro	Thr	Ser	Lys	Glu	Asp	Leu	290	295	300
Gln	Leu	Trp	Cys	His	Lys	Arg	Trp	Glu	Glu	Lys	Glu	Glu	Arg	Leu	305	310	315
Arg	Ser	Phe	Tyr	Gln	Gly	Glu	Lys	Asn	Phe	Tyr	Phe	Thr	Gly	Gln	320	325	330
Ser	Val	Ile	Pro	Pro	Cys	Lys	Ser	Glu	Leu	Arg	Val	Leu	Val	Val	335	340	345
Lys	Leu	Leu	Ser	Ile	Leu	Tyr	Trp	Thr	Leu	Phe	Ser	Pro	Ala	Met	350	355	360
Cys	Leu	Leu	Ile	Tyr	Leu	Tyr	Ser	Leu	Val	Lys	Trp	Tyr	Phe	Ile			

	365		370		375
Ile Thr Ile Val	Ile Phe Val Leu Gln	Glu Arg Ile Phe Gly Gly			
	380	385		390	
Leu Glu Ile Ile	Glu Leu Ala Cys Tyr	Arg Leu Leu His Lys Gln			
	395	400		405	
Pro His Leu Asn	Ser Lys Lys Asn Glu				
	410				

<210> 315
 <211> 2403
 <212> DNA
 <213> Homo Sapien

<400> 315
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<212> PRT
 <213> Homo Sapien

<400> 316

Met	Ala	Phe	Val	Leu	Ile	Leu	Val	Leu	Ser	Phe	Tyr	Glu	Leu	Val	1	5	10	15
Ser	Gly	Gln	Trp	Gln	Val	Thr	Gly	Pro	Gly	Lys	Phe	Val	Gln	Ala	20	25	30	
Leu	Val	Gly	Glu	Asp	Ala	Val	Phe	Ser	Cys	Ser	Leu	Phe	Pro	Glu	35	40	45	
Thr	Ser	Ala	Glu	Ala	Met	Glu	Val	Arg	Phe	Phe	Arg	Asn	Gln	Phe	50	55	60	
His	Ala	Val	Val	His	Leu	Tyr	Arg	Asp	Gly	Glu	Asp	Trp	Glu	Ser	65	70	75	
Lys	Gln	Met	Pro	Gln	Tyr	Arg	Gly	Arg	Thr	Glu	Phe	Val	Lys	Asp	80	85	90	
Ser	Ile	Ala	Gly	Gly	Arg	Val	Ser	Leu	Arg	Leu	Lys	Asn	Ile	Thr	95	100	105	
Pro	Ser	Asp	Ile	Gly	Leu	Tyr	Gly	Cys	Trp	Phe	Ser	Ser	Gln	Ile	110	115	120	
Tyr	Asp	Glu	Glu	Ala	Thr	Trp	Glu	Leu	Arg	Val	Ala	Ala	Leu	Gly	125	130	135	
Ser	Leu	Pro	Leu	Ile	Ser	Ile	Val	Gly	Tyr	Val	Asp	Gly	Gly	Ile	140	145	150	
Gln	Leu	Leu	Cys	Leu	Ser	Ser	Gly	Trp	Phe	Pro	Gln	Pro	Thr	Ala	155	160	165	
Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Ser	Asp	Ser	Arg	170	175	180	
Ala	Asn	Ala	Asp	Gly	Tyr	Ser	Leu	Tyr	Asp	Val	Glu	Ile	Ser	Ile	185	190	195	
Ile	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Leu	Cys	Ser	Ile	His	Leu	200	205	210	
Ala	Glu	Gln	Ser	His	Glu	Val	Glu	Ser	Lys	Val	Leu	Ile	Gly	Glu	215	220	225	
Thr	Phe	Phe	Gln	Pro	Ser	Pro	Trp	Arg	Leu	Ala	Ser	Ile	Leu	Leu	230	235	240	
Gly	Leu	Leu	Cys	Gly	Ala	Leu	Cys	Gly	Val	Val	Met	Gly	Met	Ile	245	250	255	
Ile	Val	Phe	Phe	Lys	Ser	Lys	Gly	Lys	Ile	Gln	Ala	Glu	Leu	Asp	260	265	270	

Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys	275	280	285
His	Ala	Val	Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys	290	295	300
Leu	Cys	Val	Ser	Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro	305	310	315
Gln	Glu	Val	Pro	His	Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val	320	325	330
Val	Ala	Ser	Gln	Gly	Phe	Gln	Ala	Gly	Arg	His	Tyr	Trp	Glu	Val	335	340	345
Asp	Val	Gly	Gln	Asn	Val	Gly	Trp	Tyr	Val	Gly	Val	Cys	Arg	Asp	350	355	360
Asp	Val	Asp	Arg	Gly	Lys	Asn	Asn	Val	Thr	Leu	Ser	Pro	Asn	Asn	365	370	375
Gly	Tyr	Trp	Val	Leu	Arg	Leu	Thr	Thr	Glu	His	Leu	Tyr	Phe	Thr	380	385	390
Phe	Asn	Pro	His	Phe	Ile	Ser	Leu	Pro	Pro	Ser	Thr	Pro	Pro	Thr	395	400	405
Arg	Val	Gly	Val	Phe	Leu	Asp	Tyr	Glu	Gly	Gly	Thr	Ile	Ser	Phe	410	415	420
Phe	Asn	Thr	Asn	Asp	Gln	Ser	Leu	Ile	Tyr	Thr	Leu	Leu	Thr	Cys	425	430	435
Gln	Phe	Glu	Gly	Leu	Leu	Arg	Pro	Tyr	Ile	Gln	His	Ala	Met	Tyr	440	445	450
Asp	Glu	Glu	Lys	Gly	Thr	Pro	Ile	Phe	Ile	Cys	Pro	Val	Ser	Trp	455	460	465
Gly																	

<210> 317
 <211> 681
 <212> DNA
 <213> Homo Sapien

<400> 317
 gcacctgcga ccaccgtgag cagtcattggc gtactccaca gtgcagagag 50
 tcgctctggc ttctgggctt gtcttggtc tgctgctgct gctgcccaag 100
 gccttctgt cccgcgggaa gcggcaggag ccgccgccga cacctgaagg 150
 aaaattgggc cgatttcac ctatgatgca tcatcaccag gcacctcag 200
 atggccagac tcttggtgct cgtttccaga ggtctcacct tgccgaggca 250

tttgcaaagg ccaaaggatc aggtggaggt gctggaggag gaggtagtgg 300
aagaggtctg atggggcaga ttattccaat ctacggtttt gggatttttt 350
tatatatact gtacattcta ttttaaggtaa gtagaatcat cctaatacata 400
ttacatcaat gaaaatctaa tatggcgata aaaatcattg tctacattaa 450
aacttcttat agttcataaa attattttcaa atccatcatc tctttaaatc 500
ctgcctcctc ttcattgaggt acttaggata gccattatct cagtttcaca 550
taagaatggt tactcaatgt ttaagtgttt tgccccaaaa ttcacaacta 600
acaaggcaga actaggactt gaacatggat cttttgggtc ttaatccagt 650
gagtgatata attcaatgca ctcccctgcc a 681

<210> 318
<211> 128
<212> PRT
<213> Homo Sapien

<400> 318
Met Ala Tyr Ser Thr Val Gln Arg Val Ala Leu Ala Ser Gly Leu
1 5 10 15
Val Leu Ala Leu Ser Leu Leu Leu Pro Lys Ala Phe Leu Ser Arg
20 25 30
Gly Lys Arg Gln Glu Pro Pro Pro Thr Pro Glu Gly Lys Leu Gly
35 40 45
Arg Phe Pro Pro Met Met His His His Gln Ala Pro Ser Asp Gly
50 55 60
Gln Thr Pro Gly Ala Arg Phe Gln Arg Ser His Leu Ala Glu Ala
65 70 75
Phe Ala Lys Ala Lys Gly Ser Gly Gly Gly Ala Gly Gly Gly Gly
80 85 90
Ser Gly Arg Gly Leu Met Gly Gln Ile Ile Pro Ile Tyr Gly Phe
95 100 105
Gly Ile Phe Leu Tyr Ile Leu Tyr Ile Leu Phe Lys Val Ser Arg
110 115 120
Ile Ile Leu Ile Ile Leu His Gln
125

<210> 319
<211> 2103
<212> DNA
<213> Homo Sapien

<400> 319
ccttcacagg actcttcatt gctgggtggc aatgatgtat cggccagatg 50

tgggtgagggc taggaaaaga gtttgttggg aaccctgggt tatcggcctc 100
 gtcattcttca tatccctgat tgtcctggca gtgtgcattg gactcactgt 150
 tcattatgtg agatataatc aaaagaagac ctacaattac tatagcacat 200
 tgtcattttac aactgacaaa ctatatgctg agtttggcag agaggcttct 250
 aacaatttta cagaaatgag ccagagactt gaatcaatgg tgaaaaatgc 300
 attttataaa tctccattaa gggaagaatt tgtcaagtct caggttatca 350
 agttcagtca acagaagcat ggagtgttgg ctcatatgct gttgatttgt 400
 agatttcact ctactgagga tcctgaaact gtagataaaa ttgttcaact 450
 tgtttttacat gaaaagctgc aagatgctgt aggaccccct aaagtagatc 500
 ctcaactcagt taaaattaaa aaaatcaaca agacagaaac agacagctat 550
 ctaaaccatt gctgcggaac acgaagaagt aaaactctag gtcagagtct 600
 caggatcggt ggtgggacag aagtagaaga ggggtgaatgg ccctggcagg 650
 ctagcctgca gtgggatggg agtcacgct gtggagcaac cttaattaat 700
 gccacatggc ttgtgagtgc tgctcactgt tttacaacat ataagaacct 750
 tgccagatgg actgcttctt ttggagtaac aataaaacct tcgaaaatga 800
 aacgggggtct ccggagaata attgtccatg aaaaatacaa acacccatca 850
 catgactatg atattttctt tgcagagctt tctagccctg ttccctacac 900
 aaatgcagta catagagttt gtctccctga tgcacccctat gagtttcaac 950
 caggatgatgt gatgtttgtg acaggatttg gagcactgaa aaatgatggg 1000
 tacagtcaaa atcatcttcg acaagcacag gtgactctca tagacgctac 1050
 aacttgcaat gaacctcaag cttacaatga cgccataact cctagaatgt 1100
 tatgtgctgg ctcccttagaa ggaaaaacag atgcatgcca gggtgactct 1150
 ggaggaccac tgggttagttc agatgctaga gatattctgg accttgctgg 1200
 aatagtgagc tggggagatg aatgtgcgaa acccaacaag cctggtgttt 1250
 atactagagt tacggccttg cgggactgga ttacttcaaa aactggtatc 1300
 taagagacaa aagcctcatg gaacagataa catttttttt tgttttttgg 1350
 gtgtggaggg cattttttaga gatacagaat tggagaagac ttgcaaaaca 1400
 gctagatttg actgatctca ataaactgtt tgcttgatgc atgtattttc 1450
 ttcccagctc tgttccgcac gtaagcatcc tgcttctgcc agatcaactc 1500

tgtcatctgt gagcaatagt tgaaacttta tgtacataga gaaatagata 1550
 atacaatatt acattacagc ctgtattcat ttgttctcta gaagttttgt 1600
 cagaattttg acttggtgac ataaatttgt aatgcatata tacaatttga 1650
 agcactcctt ttcttcagtt cctcagctcc tctcatttca gcaaatatcc 1700
 attttcaagg tgcagaacaa ggagtgaaag aaaatataag aagaaaaaaa 1750
 tcccctacat tttattggca cagaaaagta ttaggtgttt ttcttagtgg 1800
 aatattagaa atgatcatat tcattatgaa aggtcaagca aagacagcag 1850
 aataccaatc acttcatcat ttaggaagta tgggaactaa gttaaggaag 1900
 tccagaaaga agccaagata tacccttatt ttcatttcca aacaactact 1950
 atgataaatg tgaagaagat tctgtttttt tgtgacctat aataattata 2000
 caaacttcat gcaatgtact tgttctaagc aaattaaagc aaatatttat 2050
 ttaacattgt tactgaggat gtcaacatat aacaataaaa tataaatcac 2100
 cca 2103

<210> 320
 <211> 423
 <212> PRT
 <213> Homo Sapien

<400> 320
 Met Met Tyr Arg Pro Asp Val Val Arg Ala Arg Lys Arg Val Cys
 1 5 10 15
 Trp Glu Pro Trp Val Ile Gly Leu Val Ile Phe Ile Ser Leu Ile
 20 25 30
 Val Leu Ala Val Cys Ile Gly Leu Thr Val His Tyr Val Arg Tyr
 35 40 45
 Asn Gln Lys Lys Thr Tyr Asn Tyr Tyr Ser Thr Leu Ser Phe Thr
 50 55 60
 Thr Asp Lys Leu Tyr Ala Glu Phe Gly Arg Glu Ala Ser Asn Asn
 65 70 75
 Phe Thr Glu Met Ser Gln Arg Leu Glu Ser Met Val Lys Asn Ala
 80 85 90
 Phe Tyr Lys Ser Pro Leu Arg Glu Glu Phe Val Lys Ser Gln Val
 95 100 105
 Ile Lys Phe Ser Gln Gln Lys His Gly Val Leu Ala His Met Leu
 110 115 120
 Leu Ile Cys Arg Phe His Ser Thr Glu Asp Pro Glu Thr Val Asp
 125 130 135

Lys Ile Val Gln	Leu Val Leu His Glu	Lys Leu Gln Asp Ala Val	140	145	150
Gly Pro Pro Lys	Val Asp Pro His Ser	Val Lys Ile Lys Lys Ile	155	160	165
Asn Lys Thr Glu	Thr Asp Ser Tyr Leu	Asn His Cys Cys Gly Thr	170	175	180
Arg Arg Ser Lys	Thr Leu Gly Gln Ser	Leu Arg Ile Val Gly Gly	185	190	195
Thr Glu Val Glu	Glu Gly Glu Trp Pro	Trp Gln Ala Ser Leu Gln	200	205	210
Trp Asp Gly Ser	His Arg Cys Gly Ala	Thr Leu Ile Asn Ala Thr	215	220	225
Trp Leu Val Ser	Ala Ala His Cys Phe	Thr Thr Tyr Lys Asn Pro	230	235	240
Ala Arg Trp Thr	Ala Ser Phe Gly Val	Thr Ile Lys Pro Ser Lys	245	250	255
Met Lys Arg Gly	Leu Arg Arg Ile Ile	Val His Glu Lys Tyr Lys	260	265	270
His Pro Ser His	Asp Tyr Asp Ile Ser	Leu Ala Glu Leu Ser Ser	275	280	285
Pro Val Pro Tyr	Thr Asn Ala Val His	Arg Val Cys Leu Pro Asp	290	295	300
Ala Ser Tyr Glu	Phe Gln Pro Gly Asp	Val Met Phe Val Thr Gly	305	310	315
Phe Gly Ala Leu	Lys Asn Asp Gly Tyr	Ser Gln Asn His Leu Arg	320	325	330
Gln Ala Gln Val	Thr Leu Ile Asp Ala	Thr Thr Cys Asn Glu Pro	335	340	345
Gln Ala Tyr Asn	Asp Ala Ile Thr Pro	Arg Met Leu Cys Ala Gly	350	355	360
Ser Leu Glu Gly	Lys Thr Asp Ala Cys	Gln Gly Asp Ser Gly Gly	365	370	375
Pro Leu Val Ser	Ser Asp Ala Arg Asp	Ile Trp Tyr Leu Ala Gly	380	385	390
Ile Val Ser Trp	Gly Asp Glu Cys Ala	Lys Pro Asn Lys Pro Gly	395	400	405
Val Tyr Thr Arg	Val Thr Ala Leu Arg	Asp Trp Ile Thr Ser Lys	410	415	420
Thr Gly Ile					

<210> 321
 <211> 1034
 <212> DNA
 <213> Homo Sapien

<400> 321
 ccgggctcct ggggtgaggcc ggcaagtttg gagcgtggtc agacaatagg 50
 ggcgtggcta cggctcgcgg agcgcaacca acgctctaga ccagacctgg 100
 gctcgagacc ataactgttt ggctttaaca gtacgtgggc ggccggaatc 150
 cgggagtcgg gtgaccggg ctgtggtcta gcataaaggc ggagcccaga 200
 agaaggggcg gggatatgga gaagcctccc cacctgcccc cgcaaggcgg 250
 catctgctgg tctgtctgt gctcctctct accctggtga tcccctccgc 300
 tgcagctcct atccatgatg ctgacgccc agagagctcc ttgggtctca 350
 caggcctcca gagcctactc caaggcttca gccgactttt cctgaaaggt 400
 aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 450
 gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg 500
 ggaacaacac cctctccagc cacctccaga tcgacaagat gaccgacaac 550
 aagacaggag aggtgctgat ctccgagaat gtggtggcat ccattcaacc 600
 agcggagggg agcttcgagg gtgatttgaa ggtaccagg atggaggaga 650
 aggaggccct ggtaccatc cagaaggcca cggacagctt ccacacagaa 700
 ctccatcccc ggggtggcctt ctggatcatt aagctgccac ggcggaggtc 750
 ccaccaggat gccctggagg gcgccactg gctcagcgag aagcgacacc 800
 gcctgcaggc catccgggat ggactccgca aggggacca caaggacgtc 850
 ctagaagagg ggaccgagag ctctcccac tccaggctgt ccccccgaaa 900
 gaccactta ctgtacatcc tcaggccctc tcggcagctg taggggtggg 950
 gaccggggag cacctgcctg tagcccccac cagaccctgc cccaagcacc 1000
 atatggaaat aaagttcttt cttacatcta aaaa 1034

<210> 322
 <211> 242
 <212> PRT
 <213> Homo Sapien

<400> 322
 Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu
 1 5 10 15

Val	Leu	Leu	Leu	Leu	Leu	Ser	Thr	Leu	Val	Ile	Pro	Ser	Ala	Ala	
				20					25					30	
Ala	Pro	Ile	His	Asp	Ala	Asp	Ala	Gln	Glu	Ser	Ser	Leu	Gly	Leu	
				35					40					45	
Thr	Gly	Leu	Gln	Ser	Leu	Leu	Gln	Gly	Phe	Ser	Arg	Leu	Phe	Leu	
				50					55					60	
Lys	Gly	Asn	Leu	Leu	Arg	Gly	Ile	Asp	Ser	Leu	Phe	Ser	Ala	Pro	
				65					70					75	
Met	Asp	Phe	Arg	Gly	Leu	Pro	Gly	Asn	Tyr	His	Lys	Glu	Glu	Asn	
				80					85					90	
Gln	Glu	His	Gln	Leu	Gly	Asn	Asn	Thr	Leu	Ser	Ser	His	Leu	Gln	
				95					100					105	
Ile	Asp	Lys	Met	Thr	Asp	Asn	Lys	Thr	Gly	Glu	Val	Leu	Ile	Ser	
				110					115					120	
Glu	Asn	Val	Val	Ala	Ser	Ile	Gln	Pro	Ala	Glu	Gly	Ser	Phe	Glu	
				125					130					135	
Gly	Asp	Leu	Lys	Val	Pro	Arg	Met	Glu	Glu	Lys	Glu	Ala	Leu	Val	
				140					145					150	
Pro	Ile	Gln	Lys	Ala	Thr	Asp	Ser	Phe	His	Thr	Glu	Leu	His	Pro	
				155					160					165	
Arg	Val	Ala	Phe	Trp	Ile	Ile	Lys	Leu	Pro	Arg	Arg	Arg	Ser	His	
				170					175					180	
Gln	Asp	Ala	Leu	Glu	Gly	Gly	His	Trp	Leu	Ser	Glu	Lys	Arg	His	
				185					190					195	
Arg	Leu	Gln	Ala	Ile	Arg	Asp	Gly	Leu	Arg	Lys	Gly	Thr	His	Lys	
				200					205					210	
Asp	Val	Leu	Glu	Glu	Gly	Thr	Glu	Ser	Ser	Ser	His	Ser	Arg	Leu	
				215					220					225	
Ser	Pro	Arg	Lys	Thr	His	Leu	Leu	Tyr	Ile	Leu	Arg	Pro	Ser	Arg	
				230					235					240	

Gln Leu

<210> 323

<211> 2397

<212> DNA

<213> Homo Sapien

<400> 323

agagaaagaa gcgtctccag ctgaagccaa tgcagccctc cggctctccg 50

cgaagaagtt cctgccccg atgagccccc gccgtgcgtc cccgactatc 100

cccaggcggg cgtggggcac cgggccagc gccgacgac gctgccgttt 150
 tgcccttggg agtaggatgt ggtgaaagga tggggcttct cccttacggg 200
 gctcacaatg gccagagaag attccgtgaa gtgtctgcgc tgcttgcctc 250
 acgccctcaa tctgctcttt tggttaatgt ccatcagtggt gttggcagtt 300
 tctgcttgga tgagggacta cctaaataat gttctcactt taactgcaga 350
 aacgagggta gaggaagcag tcattttgac ttactttcct gtggttcac 400
 cggtcagatg tgctgtttgc tgtttcctta tcattgtggg gatgttagga 450
 tattgtggaa cggtgaaaag aaatctgttg cttcttgcac ggtactttgg 500
 aagtttgctt gtcattttct gtgtagaact ggcttgtggc gtttggacat 550
 atgaacagga acttatggtt ccagtacaat ggtcagatat ggtcactttg 600
 aaagccagga tgacaaatta tggattacct agatatcggg ggcttactca 650
 tgcttggaat ttttttcaga gagagtttaa gtgctgtgga gtagtatatt 700
 tcaactgactg gttggaaatg acagagatgg actggcccc agattcctgc 750
 tgtgttagag aattcccagg atgttccaaa caggcccacc aggaagatct 800
 cagtgcctt tatcaagagg gttgtgggaa gaaaatgtat tcctttttga 850
 gaggaaccaa acaactgcag gtgctgaggt ttctgggaat ctccattggg 900
 gtgacacaaa tcctggccat gattctcacc attactctgc tctgggctct 950
 gtattatgat agaagggagc ctgggacaga ccaaagatg tccttgaaga 1000
 atgacaactc tcagcacctg tcatgtccct cagtagaact gttgaaacca 1050
 agcctgtcaa gaatctttga acacacatcc atggcaaaca gctttaatac 1100
 acactttgag atggaggagt tataaaaaga aatgtcacag aagaaaacca 1150
 caaacttggt ttattggact tgtgaatttt tgagtacata ctatgtgttt 1200
 cagaaatatg tagaaataaa aatgttgcca taaaataaca cctaagcata 1250
 tactattcta tgctttaaaa tgaggatgga aaagtttcat gtcataagtc 1300
 accacctgga caataattga tgcccttaa atgctgaaga cagatgtcat 1350
 acccactgtg tagcctgtgt atgactttta ctgaacacag ttatgttttg 1400
 aggcagcatg gtttgattag catttccgca tccatgcaaa cgagtcacat 1450
 atggtgggac tggagccata gtaaagggtt atttacttct accaactagt 1500
 atataaagta ctaattaaat gctaacatag gaagttagaa aataactaata 1550

Leu Leu Leu Ala Trp Tyr Phe Gly Ser Leu Leu Val Ile Phe Cys
95 100 105

Val Glu Leu Ala Cys Gly Val Trp Thr Tyr Glu Gln Glu Leu Met
110 115 120

Val Pro Val Gln Trp Ser Asp Met Val Thr Leu Lys Ala Arg Met
125 130 135

Thr Asn Tyr Gly Leu Pro Arg Tyr Arg Trp Leu Thr His Ala Trp
140 145 150

Asn Phe Phe Gln Arg Glu Phe Lys Cys Cys Gly Val Val Tyr Phe
155 160 165

Thr Asp Trp Leu Glu Met Thr Glu Met Asp Trp Pro Pro Asp Ser
170 175 180

Cys Cys Val Arg Glu Phe Pro Gly Cys Ser Lys Gln Ala His Gln
185 190 195

Glu Asp Leu Ser Asp Leu Tyr Gln Glu Gly Cys Gly Lys Lys Met
200 205 210

Tyr Ser Phe Leu Arg Gly Thr Lys Gln Leu Gln Val Leu Arg Phe
215 220 225

Leu Gly Ile Ser Ile Gly Val Thr Gln Ile Leu Ala Met Ile Leu
230 235 240

Thr Ile Thr Leu Leu Trp Ala Leu Tyr Tyr Asp Arg Arg Glu Pro
245 250 255

Gly Thr Asp Gln Met Met Ser Leu Lys Asn Asp Asn Ser Gln His
260 265 270

Leu Ser Cys Pro Ser Val Glu Leu Leu Lys Pro Ser Leu Ser Arg
275 280 285

Ile Phe Glu His Thr Ser Met Ala Asn Ser Phe Asn Thr His Phe
290 295 300

Glu Met Glu Glu Leu
305

<210> 325

<211> 2212

<212> DNA

<213> Homo Sapien

<400> 325

agcagtgcac tgctggagcgc aggagaagct cacgaatcag ctgcaggtct 50

ctgttttgaa aaagcagaga tacagaggca gaggaaaagg gtggactcct 100

atgtgacctg ttcttagagc aagacaatca ccatctgaat tccagaagcc 150

ctgttcacgg ttggggatat ttctctgact gcatggaatc agaaagaagc 200

caattcttgg aagtgattac tcctttactc aagtgtataa ctgggatgca 1700
gagaaagcca aatttgtgaa atttcaggaa ttaaagtgtc aggcaccaag 1750
atcattcaca catgtgtcca ttaataagcg taattttctt tttgcttcca 1800
gttttaaggg aaatacacag atttacaac atgtcatagt tgacttaagc 1850
gcatgagaca ccaaattctg tggctgccat cagaaatttt ctacagtaca 1900
tgacccggat gaactcaatg catgatgact cttcttatca cacttgcaaa 1950
tgaatgcctt tcaaacattg agactgctag aaccaagcac taccagtatc 2000
tccatcctta actgtccagt ccagtgatgt gggaagttac cttttataag 2050
acaaaattta attgtgtaac tgttctttgc agtgaagatg tgtaaataag 2100
cgtttaatgg tatctgttac tccaaaaaga aatattaata tgtacttttc 2150
catttattta ttcatgtgta cagaaacaac tgccaaataa aatgtttaca 2200
ttttctttca ta 2212

<210> 326
<211> 557
<212> PRT
<213> Homo Sapien

<400> 326
Met Glu Ser Glu Arg Ser Lys Arg Met Gly Asn Ala Cys Ile Pro
1 5 10 15
Leu Lys Arg Ile Ala Tyr Phe Leu Cys Leu Leu Ser Ala Leu Leu
20 25 30
Leu Thr Glu Gly Lys Lys Pro Ala Lys Pro Lys Cys Pro Ala Val
35 40 45
Cys Thr Cys Thr Lys Asp Asn Ala Leu Cys Glu Asn Ala Arg Ser
50 55 60
Ile Pro Arg Thr Val Pro Pro Asp Val Ile Ser Leu Ser Phe Val
65 70 75
Arg Ser Gly Phe Thr Glu Ile Ser Glu Gly Ser Phe Leu Phe Thr
80 85 90
Pro Ser Leu Gln Leu Leu Leu Phe Thr Ser Asn Ser Phe Asp Val
95 100 105
Ile Ser Asp Asp Ala Phe Ile Gly Leu Pro His Leu Glu Tyr Leu
110 115 120
Phe Ile Glu Asn Asn Asn Ile Lys Ser Ile Ser Arg His Thr Phe
125 130 135
Arg Gly Leu Lys Ser Leu Ile His Leu Ser Leu Ala Asn Asn Asn

Lys His Phe Ser Val Lys Gly Asp Val Tyr Ile Cys Leu Thr Arg
 440 445 450
 Phe Ile Gly Asp Ser Lys Val Met Lys Trp Gly Gly Ser Ser Phe
 455 460 465
 Gln Asp Ile Gln Arg Met Pro Ser Arg Gly Ser Met Val Phe Gln
 470 475 480
 Pro Leu Gln Ile Asn Asn Tyr Gln Tyr Ala Ile Leu Gly Ser Asp
 485 490 495
 Tyr Ser Phe Thr Gln Val Tyr Asn Trp Asp Ala Glu Lys Ala Lys
 500 505 510
 Phe Val Lys Phe Gln Glu Leu Asn Val Gln Ala Pro Arg Ser Phe
 515 520 525
 Thr His Val Ser Ile Asn Lys Arg Asn Phe Leu Phe Ala Ser Ser
 530 535 540
 Phe Lys Gly Asn Thr Gln Ile Tyr Lys His Val Ile Val Asp Leu
 545 550 555
 Ser Ala

<210> 327
 <211> 2339
 <212> DNA
 <213> Homo Sapien

<400> 327
 ccaaggccag agctgtggac accttatccc actcatcctc atcctcttcc 50
 tctgataaag ccctaccag tgctgataaa gtctttctcg tgagagccta 100
 gaggccttaa aaaaaaaagt gcttgaaaga gaaggggaca aaggaacacc 150
 agtattaaga ggattttcca gtgtttctgg cagttggtcc agaaggatgc 200
 ctccattcct gcttctcacc tgctcttcca tcacaggcac ctccgtgtca 250
 cccgtggccc tagatccttg ttctgcttac atcagcctga atgagccctg 300
 gaggaacact gaccaccagt tggatgagtc tcaaggctct cctctatgtg 350
 acaaccatgt gaatggggag tggatccact tcacgggcat ggcgggagat 400
 gccatgccta ctttctgcat accagaaaac cactgtggaa cccacgcacc 450
 tgtctggctc aatggcagcc accccctaga aggcgacggc attgtgcaac 500
 gccaggcttg tgccagcttc aatgggaact gctgtctctg gaacaccacg 550
 gtggaagtca aggcttgccc tggaggctac tatgtgtatc gtctgaccaa 600
 gccacagcgtc tgcttccacg tctactgtgg tcatttttat gacatctgcg 650

catttctttc ctacacttaa atacctcgtg tatgggtgcaa tcagaccaca 2150
aatcagaag ctgggtataa tatttcaagt tacaaaccct agaaaaatta 2200
aacagttact gaaattatga cttaaatacc caatgactcc ttaaatatgt 2250
aaattatagt tataccttga aatttcaatt caaatgcaga ctaattatag 2300
ggaatttgga agtgtatcaa taaaacagta tataatttt 2339

<210> 328

<211> 545

<212> PRT

<213> Homo Sapien

<400> 328

Met	Pro	Pro	Phe	Leu	Leu	Leu	Thr	Cys	Leu	Phe	Ile	Thr	Gly	Thr	1	5	10	15
Ser	Val	Ser	Pro	Val	Ala	Leu	Asp	Pro	Cys	Ser	Ala	Tyr	Ile	Ser	20	25	30	
Leu	Asn	Glu	Pro	Trp	Arg	Asn	Thr	Asp	His	Gln	Leu	Asp	Glu	Ser	35	40	45	
Gln	Gly	Pro	Pro	Leu	Cys	Asp	Asn	His	Val	Asn	Gly	Glu	Trp	Tyr	50	55	60	
His	Phe	Thr	Gly	Met	Ala	Gly	Asp	Ala	Met	Pro	Thr	Phe	Cys	Ile	65	70	75	
Pro	Glu	Asn	His	Cys	Gly	Thr	His	Ala	Pro	Val	Trp	Leu	Asn	Gly	80	85	90	
Ser	His	Pro	Leu	Glu	Gly	Asp	Gly	Ile	Val	Gln	Arg	Gln	Ala	Cys	95	100	105	
Ala	Ser	Phe	Asn	Gly	Asn	Cys	Cys	Leu	Trp	Asn	Thr	Thr	Val	Glu	110	115	120	
Val	Lys	Ala	Cys	Pro	Gly	Gly	Tyr	Tyr	Val	Tyr	Arg	Leu	Thr	Lys	125	130	135	
Pro	Ser	Val	Cys	Phe	His	Val	Tyr	Cys	Gly	His	Phe	Tyr	Asp	Ile	140	145	150	
Cys	Asp	Glu	Asp	Cys	His	Gly	Ser	Cys	Ser	Asp	Thr	Ser	Glu	Cys	155	160	165	
Thr	Cys	Ala	Pro	Gly	Thr	Val	Leu	Gly	Pro	Asp	Arg	Gln	Thr	Cys	170	175	180	
Phe	Asp	Glu	Asn	Glu	Cys	Glu	Gln	Asn	Asn	Gly	Gly	Cys	Ser	Glu	185	190	195	
Ile	Cys	Val	Asn	Leu	Lys	Asn	Ser	Tyr	Arg	Cys	Glu	Cys	Gly	Val	200	205	210	

Gly	Arg	Val	Leu	Arg	Ser	Asp	Gly	Lys	Thr	Cys	Glu	Asp	Val	Glu	
				215					220					225	
Gly	Cys	His	Asn	Asn	Asn	Gly	Gly	Cys	Ser	His	Ser	Cys	Leu	Gly	
				230					235					240	
Ser	Glu	Lys	Gly	Tyr	Gln	Cys	Glu	Cys	Pro	Arg	Gly	Leu	Val	Leu	
				245					250					255	
Ser	Glu	Asp	Asn	His	Thr	Cys	Gln	Val	Pro	Val	Leu	Cys	Lys	Ser	
				260					265					270	
Asn	Ala	Ile	Glu	Val	Asn	Ile	Pro	Arg	Glu	Leu	Val	Gly	Gly	Leu	
				275					280					285	
Glu	Leu	Phe	Leu	Thr	Asn	Thr	Ser	Cys	Arg	Gly	Val	Ser	Asn	Gly	
				290					295					300	
Thr	His	Val	Asn	Ile	Leu	Phe	Ser	Leu	Lys	Thr	Cys	Gly	Thr	Val	
				305					310					315	
Val	Asp	Val	Val	Asn	Asp	Lys	Ile	Val	Ala	Ser	Asn	Leu	Val	Thr	
				320					325					330	
Gly	Leu	Pro	Lys	Gln	Thr	Pro	Gly	Ser	Ser	Gly	Asp	Phe	Ile	Ile	
				335					340					345	
Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Val	Thr	Cys	Glu	Phe	Pro	Arg	
				350					355					360	
Leu	Tyr	Thr	Ile	Ser	Glu	Gly	Tyr	Val	Pro	Asn	Leu	Arg	Asn	Ser	
				365					370					375	
Pro	Leu	Glu	Ile	Met	Ser	Arg	Asn	His	Gly	Ile	Phe	Pro	Phe	Thr	
				380					385					390	
Leu	Glu	Ile	Phe	Lys	Asp	Asn	Glu	Phe	Glu	Glu	Pro	Tyr	Arg	Glu	
				395					400					405	
Ala	Leu	Pro	Thr	Leu	Lys	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Gly	Ile	
				410					415					420	
Glu	Pro	Val	Val	His	Val	Ser	Gly	Leu	Glu	Ser	Leu	Val	Glu	Ser	
				425					430					435	
Cys	Phe	Ala	Thr	Pro	Thr	Ser	Lys	Ile	Asp	Glu	Val	Leu	Lys	Tyr	
				440					445					450	
Tyr	Leu	Ile	Arg	Asp	Gly	Cys	Val	Ser	Asp	Asp	Ser	Val	Lys	Gln	
				455					460					465	
Tyr	Thr	Ser	Arg	Asp	His	Leu	Ala	Lys	His	Phe	Gln	Val	Pro	Val	
				470					475					480	
Phe	Lys	Phe	Val	Gly	Lys	Asp	His	Lys	Glu	Val	Phe	Leu	His	Cys	
				485					490					495	
Arg	Val	Leu	Val	Cys	Gly	Val	Leu	Asp	Glu	Arg	Ser	Arg	Cys	Ala	

	500		505		510
Gln Gly Cys His Arg Arg Met Arg Arg Gly Ala Gly Gly Glu Asp					
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Ser Ala Gly Leu Gln Gly Gln Thr Leu Thr Gly Gly Pro Ile Arg					
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Ile Asp Trp Glu Asp					
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<210> 329

<211> 2063

<212> DNA

<213> Homo Sapien

<400> 329

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agagccagca tggtacagga tcctgacagt gatcaacctc tgaacagcct 250

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gctgtggaga ttggcccaga ccaggatctg gatgttggtt aaatcacaga 700

aaacagccag gagcttcgca tgcggaactc aagtgggccc tgtctctcag 750

gctccctggt ctccctgcac tgtcttgctt gtgggaagag cctgaagacc 800

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gtgttcaact ggaaggtgcg ggcaggctca gacaaactgg gcagcttccc 1000

atccctggct gtggccaaga tcatcatcat tgaattcaac cccatgtacc 1050

ccaaagacaa tgacatcgcc ctcatgaagc tgcagttccc actcactttc 1100
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tccagccacc ccactctgga tcattggatg gggctttacg aagcagaatg 1200
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caaaaaaaaaaaa aaa 2063

<210> 330
<211> 432
<212> PRT
<213> Homo Sapien

<400> 330
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Val Lys Pro Leu Arg Lys Pro Arg Ile Pro Met Glu Thr Phe Arg
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Lys Val Gly Ile Pro Ile Ile Ile Ala Leu Leu Ser Leu Ala Ser
35 40 45
Ile Ile Ile Val Val Val Leu Ile Lys Val Ile Leu Asp Lys Tyr

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Tyr	Phe	Leu	Cys	Gly	Gln	Pro	Leu	His	Phe	Ile	Pro	Arg	Lys	Gln	
				65					70						75
Leu	Cys	Asp	Gly	Glu	Leu	Asp	Cys	Pro	Leu	Gly	Glu	Asp	Glu	Glu	
				80					85						90
His	Cys	Val	Lys	Ser	Phe	Pro	Glu	Gly	Pro	Ala	Val	Ala	Val	Arg	
				95					100						105
Leu	Ser	Lys	Asp	Arg	Ser	Thr	Leu	Gln	Val	Leu	Asp	Ser	Ala	Thr	
				110					115						120
Gly	Asn	Trp	Phe	Ser	Ala	Cys	Phe	Asp	Asn	Phe	Thr	Glu	Ala	Leu	
				125					130						135
Ala	Glu	Thr	Ala	Cys	Arg	Gln	Met	Gly	Tyr	Ser	Arg	Ala	Val	Glu	
				140					145						150
Ile	Gly	Pro	Asp	Gln	Asp	Leu	Asp	Val	Val	Glu	Ile	Thr	Glu	Asn	
				155					160						165
Ser	Gln	Glu	Leu	Arg	Met	Arg	Asn	Ser	Ser	Gly	Pro	Cys	Leu	Ser	
				170					175						180
Gly	Ser	Leu	Val	Ser	Leu	His	Cys	Leu	Ala	Cys	Gly	Lys	Ser	Leu	
				185					190						195
Lys	Thr	Pro	Arg	Val	Val	Gly	Gly	Glu	Glu	Ala	Ser	Val	Asp	Ser	
				200					205						210
Trp	Pro	Trp	Gln	Val	Ser	Ile	Gln	Tyr	Asp	Lys	Gln	His	Val	Cys	
				215					220						225
Gly	Gly	Ser	Ile	Leu	Asp	Pro	His	Trp	Val	Leu	Thr	Ala	Ala	His	
				230					235						240
Cys	Phe	Arg	Lys	His	Thr	Asp	Val	Phe	Asn	Trp	Lys	Val	Arg	Ala	
				245					250						255
Gly	Ser	Asp	Lys	Leu	Gly	Ser	Phe	Pro	Ser	Leu	Ala	Val	Ala	Lys	
				260					265						270
Ile	Ile	Ile	Ile	Glu	Phe	Asn	Pro	Met	Tyr	Pro	Lys	Asp	Asn	Asp	
				275					280						285
Ile	Ala	Leu	Met	Lys	Leu	Gln	Phe	Pro	Leu	Thr	Phe	Ser	Gly	Thr	
				290					295						300
Val	Arg	Pro	Ile	Cys	Leu	Pro	Phe	Phe	Asp	Glu	Glu	Leu	Thr	Pro	
				305					310						315
Ala	Thr	Pro	Leu	Trp	Ile	Ile	Gly	Trp	Gly	Phe	Thr	Lys	Gln	Asn	
				320					325						330
Gly	Gly	Lys	Met	Ser	Asp	Ile	Leu	Leu	Gln	Ala	Ser	Val	Gln	Val	
				335					340						345

Ile	Asp	Ser	Thr	Arg	Cys	Asn	Ala	Asp	Asp	Ala	Tyr	Gln	Gly	Glu
				350					355					360
Val	Thr	Glu	Lys	Met	Met	Cys	Ala	Gly	Ile	Pro	Glu	Gly	Gly	Val
				365					370					375
Asp	Thr	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Met	Tyr	Gln	Ser
				380					385					390
Asp	Gln	Trp	His	Val	Val	Gly	Ile	Val	Ser	Trp	Gly	Tyr	Gly	Cys
				395					400					405
Gly	Gly	Pro	Ser	Thr	Pro	Gly	Val	Tyr	Thr	Lys	Val	Ser	Ala	Tyr
				410					415					420
Leu	Asn	Trp	Ile	Tyr	Asn	Val	Trp	Lys	Ala	Glu	Leu			
				425					430					

<210> 331
 <211> 1797
 <212> DNA
 <213> Homo Sapien

<400> 331
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 aaataagaaa attctcaagg aggacgagct cttgagttag acccaacaag 150
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 aaaactcagt gtccgtcagg attgtcgga gtagtaaccg aggccgggct 1400
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 gcgcttgacc cggaaaccct ttcaattctc tgcctccgag gtgtcctcgg 1700
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<210> 332

<211> 520

<212> PRT

<213> Homo Sapien

<400> 332

Met	Arg	Asn	Lys	Lys	Ile	Leu	Lys	Glu	Asp	Glu	Leu	Leu	Ser	Glu
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Thr	Gln	Gln	Ala	Ala	Phe	His	Gln	Ile	Ala	Met	Glu	Pro	Phe	Glu
				20					25					30
Ile	Asn	Val	Pro	Lys	Pro	Lys	Arg	Arg	Asn	Gly	Val	Asn	Phe	Ser
				35					40					45
Leu	Ala	Val	Val	Val	Ile	Tyr	Leu	Ile	Leu	Leu	Thr	Ala	Gly	Ala
				50					55					60
Gly	Leu	Leu	Val	Val	Gln	Val	Leu	Asn	Leu	Gln	Ala	Arg	Leu	Arg
				65					70					75

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 tgggggcccgg gtggggccag gaggggtcag agcccgtcct gctggagggg 600
 gagtgcctgg tggctctgtga gcctggccga gctgctgcag gggggcccgg 650
 gggagcagcc ctgggagagg cccccctgg gcgagtggca tttgctgcgg 700
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 caactagaga atgggtggta gtgagacact atagaattac taaggagaag 2250
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 agaggaaaat aaatatcaaa ctgtatacta aaattaaaaa 2340

<210> 334

<211> 205

<212> PRT

<213> Homo Sapien

<400> 334

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Trp	Ala	Gln	Glu	Gly	Ser	Glu	Pro	Val	Leu	Leu	Glu	Gly	Glu	Cys	35	40	45	
Leu	Val	Val	Cys	Glu	Pro	Gly	Arg	Ala	Ala	Ala	Gly	Gly	Pro	Gly	50	55	60	
Gly	Ala	Ala	Leu	Gly	Glu	Ala	Pro	Pro	Gly	Arg	Val	Ala	Phe	Ala	65	70	75	
Ala	Val	Arg	Ser	His	His	His	Glu	Pro	Ala	Gly	Glu	Thr	Gly	Asn	80	85	90	
Gly	Thr	Ser	Gly	Ala	Ile	Tyr	Phe	Asp	Gln	Val	Leu	Val	Asn	Glu	95	100	105	
Gly	Gly	Gly	Phe	Asp	Arg	Ala	Ser	Gly	Ser	Phe	Val	Ala	Pro	Val	110	115	120	
Arg	Gly	Val	Tyr	Ser	Phe	Arg	Phe	His	Val	Val	Lys	Val	Tyr	Asn	125	130	135	
Arg	Gln	Thr	Val	Gln	Val	Ser	Leu	Met	Leu	Asn	Thr	Trp	Pro	Val	140	145	150	
Ile	Ser	Ala	Phe	Ala	Asn	Asp	Pro	Asp	Val	Thr	Arg	Glu	Ala	Ala	155	160	165	
Thr	Ser	Ser	Val	Leu	Leu	Pro	Leu	Asp	Pro	Gly	Asp	Arg	Val	Ser	170	175	180	

Leu Arg Leu Arg Arg Gly Asn Leu Leu Gly Gly Trp Lys Tyr Ser
 185 190 195

Ser Phe Ser Gly Phe Leu Ile Phe Pro Leu
 200 205

<210> 335
 <211> 1570
 <212> DNA
 <213> Homo Sapien

<400> 335
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 ttcccgcggg gccgtgactg ggcgggcttc agccatgaag accctcatag 200
 ccgcctactc cggggtcctg cgcggcgagc gtcaggccga ggctgaccgg 250
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tttgctctgt aaatttggaa gtgtcatggg tgtctgtggg ttatttaaaa 1450
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aaaaaaaaaa aaaaaaaaaa 1570

<210> 336
<211> 388
<212> PRT
<213> Homo Sapien

<400> 336
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Arg Gln Ala Glu Ala Asp Arg Ser Gln Arg Ser His Gly Gly Pro
20 25 30
Ala Leu Ser Arg Glu Gly Ser Gly Arg Trp Gly Thr Gly Ser Ser
35 40 45
Ile Leu Ser Ala Leu Gln Asp Leu Phe Ser Val Thr Trp Leu Asn
50 55 60
Arg Ser Lys Val Glu Lys Gln Leu Gln Val Ile Ser Val Leu Gln
65 70 75
Trp Val Leu Ser Phe Leu Val Leu Gly Val Ala Cys Ser Ala Ile
80 85 90
Leu Met Tyr Ile Phe Cys Thr Asp Cys Trp Leu Ile Ala Val Leu
95 100 105
Tyr Phe Thr Trp Leu Val Phe Asp Trp Asn Thr Pro Lys Lys Gly
110 115 120
Gly Arg Arg Ser Gln Trp Val Arg Asn Trp Ala Val Trp Arg Tyr
125 130 135
Phe Arg Asp Tyr Phe Pro Ile Gln Leu Val Lys Thr His Asn Leu
140 145 150
Leu Thr Thr Arg Asn Tyr Ile Phe Gly Tyr His Pro His Gly Ile
155 160 165
Met Gly Leu Gly Ala Phe Cys Asn Phe Ser Thr Glu Ala Thr Glu

170	175	180
Val Ser Lys Lys Phe Pro Gly Ile Arg	Pro Tyr Leu Ala Thr Leu	
185	190	195
Ala Gly Asn Phe Arg Met Pro Val Leu	Arg Glu Tyr Leu Met Ser	
200	205	210
Gly Gly Ile Cys Pro Val Ser Arg Asp	Thr Ile Asp Tyr Leu Leu	
215	220	225
Ser Lys Asn Gly Ser Gly Asn Ala Ile	Ile Ile Val Val Gly Gly	
230	235	240
Ala Ala Glu Ser Leu Ser Ser Met Pro	Gly Lys Asn Ala Val Thr	
245	250	255
Leu Arg Asn Arg Lys Gly Phe Val Lys	Leu Ala Leu Arg His Gly	
260	265	270
Ala Asp Leu Val Pro Ile Tyr Ser Phe	Gly Glu Asn Glu Val Tyr	
275	280	285
Lys Gln Val Ile Phe Glu Glu Gly Ser	Trp Gly Arg Trp Val Gln	
290	295	300
Lys Lys Phe Gln Lys Tyr Ile Gly Phe	Ala Pro Cys Ile Phe His	
305	310	315
Gly Arg Gly Leu Phe Ser Ser Asp Thr	Trp Gly Leu Val Pro Tyr	
320	325	330
Ser Lys Pro Ile Thr Thr Val Val Gly	Glu Pro Ile Thr Ile Pro	
335	340	345
Lys Leu Glu His Pro Thr Gln Gln Asp	Ile Asp Leu Tyr His Thr	
350	355	360
Met Tyr Met Glu Ala Leu Val Lys Leu	Phe Asp Lys His Lys Thr	
365	370	375
Lys Phe Gly Leu Pro Glu Thr Glu Val	Leu Glu Val Asn	
380	385	

<210> 337
 <211> 3060
 <212> DNA
 <213> Homo Sapien

<400> 337
 gggcggcggg atggggggccg ggggcggcgg gcgccgcact cgctgaggcc 50
 ccgacgcagg gccgggcccgg gccccagggcc gaggagcgcg gcggccagag 100
 cggggccgcg gaggcgacgc cggggacgcc cgcgcgacga gcaggtggcg 150
 gcggctgcag gcttgtccag ccggaagccc tgagggcagc tgttccact 200

ggctctgctg accttgtgcc ttggaagggt gtcctcagcg agggggccgtg 250
 caccgcgtcc tgagcagcgc catgggcctg ctggccttcc tgaagacca 300
 gttcgtgctg cacctgctgg tcggctttgt ctctgtggtg agtggctctg 350
 tcatcaactt cgtccagctg tgcacgctgg cgctctggcc ggtcagcaag 400
 cagctctacc gccgcctcaa ctgccgcctc gcctactcac tctggagcca 450
 actggtcatg ctgctggagt ggtggctcctg cacggagtgt aactgttca 500
 cggaccaggc cacggtagag cgctttggga aggagcacgc agtcatcatc 550
 ctcaaccaca acttcgagat cgacttctc tgtgggtgga ccatgtgtga 600
 gcgcttcgga gtgctgggga gctccaaggt cctcgctaag aaggagctgc 650
 tctacgtgcc cctcatcgcc tggacgtggt actttctgga gattgtgttc 700
 tgcaagcgga agtgggagga ggaccgggac accgtggtcg aagggtgag 750
 gcgcctgtcg gactaccccg agtacatgtg gtttctcctg tactgcgagg 800
 ggacgcgctt cacggagacc aagcaccgcg ttagcatgga ggtggcggct 850
 gctaaggggc ttctgtctct caagtaccac ctgctgccgc ggaccaaggg 900
 cttcaccacc gcagtcaagt gcctccgggg gacagtcgca gctgtctatg 950
 atgtaaccct gaacttcaga ggaaacaaga acccgtcctt gctggggatc 1000
 ctctacggga agaagtacga ggcgagacatg tgcgtgagga gatttcctct 1050
 ggaagacatc ccgctggatg aaaaggaagc agctcagtgg cttcataaac 1100
 tgtaccagga gaaggacgcg ctccaggaga tatataatca gaagggcag 1150
 tttccagggg agcagtttaa gcctgcccgg aggccgtgga ccctcctgaa 1200
 cttcctgtcc tgggccacca ttctcctgtc tccctcttc agttttgtct 1250
 tgggcgtctt tgccagcgga tcacctctcc tgatcctgac tttcttgggg 1300
 tttgtgggag cagcttcctt tggagtctgc agactgatag gagaatcgct 1350
 tgaacctggg aggtggagat tgcagtgagc tgagatggca tcaactgtact 1400
 ccagcctagg caacagagca agactcagtc tcaaaaaaa aaaaaaaca 1450
 aaaaacccca gaaattctgg agttgaactg tgtagttact gacatgaaaa 1500
 attcactaga ggctgaacag cagatttgag caggcagaaa aaaatcagca 1550
 agcttgaaga tggtagcttg agatttttca ggctaataa aaaagaatga 1600
 aggaaaatta acagcctcag agacccatgg tgcaccgtca cacaatatca 1650

<210> 338
 <211> 368
 <212> PRT
 <213> Homo Sapien

<400> 338

Met	Gly	Leu	Leu	Ala	Phe	Leu	Lys	Thr	Gln	Phe	Val	Leu	His	Leu
1				5					10					15
Leu	Val	Gly	Phe	Val	Phe	Val	Val	Ser	Gly	Leu	Val	Ile	Asn	Phe
				20					25					30
Val	Gln	Leu	Cys	Thr	Leu	Ala	Leu	Trp	Pro	Val	Ser	Lys	Gln	Leu
				35					40					45
Tyr	Arg	Arg	Leu	Asn	Cys	Arg	Leu	Ala	Tyr	Ser	Leu	Trp	Ser	Gln
				50					55					60
Leu	Val	Met	Leu	Leu	Glu	Trp	Trp	Ser	Cys	Thr	Glu	Cys	Thr	Leu
				65					70					75
Phe	Thr	Asp	Gln	Ala	Thr	Val	Glu	Arg	Phe	Gly	Lys	Glu	His	Ala
				80					85					90
Val	Ile	Ile	Leu	Asn	His	Asn	Phe	Glu	Ile	Asp	Phe	Leu	Cys	Gly
				95					100					105
Trp	Thr	Met	Cys	Glu	Arg	Phe	Gly	Val	Leu	Gly	Ser	Ser	Lys	Val
				110					115					120
Leu	Ala	Lys	Lys	Glu	Leu	Leu	Tyr	Val	Pro	Leu	Ile	Gly	Trp	Thr
				125					130					135
Trp	Tyr	Phe	Leu	Glu	Ile	Val	Phe	Cys	Lys	Arg	Lys	Trp	Glu	Glu
				140					145					150
Asp	Arg	Asp	Thr	Val	Val	Glu	Gly	Leu	Arg	Arg	Leu	Ser	Asp	Tyr
				155					160					165
Pro	Glu	Tyr	Met	Trp	Phe	Leu	Leu	Tyr	Cys	Glu	Gly	Thr	Arg	Phe
				170					175					180
Thr	Glu	Thr	Lys	His	Arg	Val	Ser	Met	Glu	Val	Ala	Ala	Ala	Lys
				185					190					195
Gly	Leu	Pro	Val	Leu	Lys	Tyr	His	Leu	Leu	Pro	Arg	Thr	Lys	Gly
				200					205					210
Phe	Thr	Thr	Ala	Val	Lys	Cys	Leu	Arg	Gly	Thr	Val	Ala	Ala	Val
				215					220					225
Tyr	Asp	Val	Thr	Leu	Asn	Phe	Arg	Gly	Asn	Lys	Asn	Pro	Ser	Leu
				230					235					240
Leu	Gly	Ile	Leu	Tyr	Gly	Lys	Lys	Tyr	Glu	Ala	Asp	Met	Cys	Val
				245					250					255
Arg	Arg	Phe	Pro	Leu	Glu	Asp	Ile	Pro	Leu	Asp	Glu	Lys	Glu	Ala

<210> 341
 <211> 783
 <212> DNA
 <213> Homo Sapien

<400> 341
 cgccatggcc gggctatccc gggggtccgc gcgcgcactg ctcgccgccc 50
 tgctggcgtc gacgctgttg gcgctgctcg tgcgcgccgc gcggggtcgc 100
 ggcggccggg accacgggga ctgggacgag gcctcccggc tgccgccgct 150
 accaccccgc gaggacgcgg cgcgcgtggc ccgcttcgtg acgcacgtct 200
 ccgactgggg cgctctggcc accatctcca cgctggaggc ggtgcgcggc 250
 cggcccttcg ccgacgtcct ctcgctcagc gacgggcccc cgggcgcggg 300
 cagcggcgtg ccctatttct acctgagccc gctgcagctc tccgtgagca 350
 acctgcagga gaatccatat gctacactga ccatgacttt ggcacagacc 400
 aacttctgca agaaacatgg atttgatcca caaagtcccc tttgtgttca 450
 cataatgctg tcaggaactg tgaccaaggt gaatgaaaca gaaatggata 500
 ttgcaaagca ttcgttattc attcgacacc ctgagatgaa aacctggcct 550
 tccagccata attggttctt tgctaagttg aatataacca atatctgggt 600
 cctggactac tttggtggac caaaaatcgt gacaccagaa gaatattata 650
 atgtcacagt tcagtgaagc agactgtggg gaatttagca acacttatga 700
 agttttcttaa agtggctcat acacacttaa aaggcttaat gtttctctgg 750
 aaagcgtccc agaattattag ccagttttct gtc 783

<210> 342
 <211> 220
 <212> PRT
 <213> Homo Sapien

<400> 342
 Met Ala Gly Leu Ser Arg Gly Ser Ala Arg Ala Leu Leu Ala Ala
 1 5 10 15
 Leu Leu Ala Ser Thr Leu Leu Ala Leu Leu Val Ser Pro Ala Arg
 20 25 30
 Gly Arg Gly Gly Arg Asp His Gly Asp Trp Asp Glu Ala Ser Arg
 35 40 45
 Leu Pro Pro Leu Pro Pro Arg Glu Asp Ala Ala Arg Val Ala Arg
 50 55 60

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Phe Val Thr His Val Ser Asp Trp Gly Ala Leu Ala Thr Ile Ser
65 70 75

Thr Leu Glu Ala Val Arg Gly Arg Pro Phe Ala Asp Val Leu Ser
80 85 90

Leu Ser Asp Gly Pro Pro Gly Ala Gly Ser Gly Val Pro Tyr Phe
95 100 105

Tyr Leu Ser Pro Leu Gln Leu Ser Val Ser Asn Leu Gln Glu Asn
110 115 120

Pro Tyr Ala Thr Leu Thr Met Thr Leu Ala Gln Thr Asn Phe Cys
125 130 135

Lys Lys His Gly Phe Asp Pro Gln Ser Pro Leu Cys Val His Ile
140 145 150

Met Leu Ser Gly Thr Val Thr Lys Val Asn Glu Thr Glu Met Asp
155 160 165

Ile Ala Lys His Ser Leu Phe Ile Arg His Pro Glu Met Lys Thr
170 175 180

Trp Pro Ser Ser His Asn Trp Phe Phe Ala Lys Leu Asn Ile Thr
185 190 195

Asn Ile Trp Val Leu Asp Tyr Phe Gly Gly Pro Lys Ile Val Thr
200 205 210

Pro Glu Glu Tyr Tyr Asn Val Thr Val Gln
215 220

<210> 343
<211> 1768
<212> DNA
<213> Homo Sapien

<400> 343
ggctggactg gaactcctgg tcccaagtga tccaccgcgc tcagcctccc 50
aaggtgctgt gattataggt gtaagccacc gtgtctggcc tctgaacaac 100
tttttcagca actaaaaaag ccacaggagt tgaactgcta ggattctgac 150
tatgctgtgg tggctagtgc tctactcct acctacatta aaatctgttt 200
tttgttctct tgtaactagc ctttaccttc ctaacacaga ggatctgtca 250
ctgtggctct ggcccaaacc tgaccttcac tctggaacga gaacagaggt 300
ttctaccac accgtccct cgaagccggg gacagcctca ccttgctggc 350
ctctcgctgg agcagtgcc tcaccaactg tctcacgtct ggaggcactg 400
actcgggcag tgcaggtagc tgagcctctt ggtagctgcg gctttcaagg 450
tgggccttgc cctggcogta gaagggattg acaagcccga agatttcata 500

ggcatggct cccactgccc aggcacagc cttgctgtag tcaatcactg 550
 ccctggggcc aggcacgggc gtggacacct gctcagaagc agtgggtgag 600
 acatcacgct gcccgcacat ctaacctttt catgtcctgc acatcacctg 650
 atccatgggc taatctgaac tctgtcccaa ggaaccaga gcttgagtga 700
 gctgtggctc agaccagaa ggggtctgct tagaccacct ggtttatgtg 750
 acaggacttg cattctcctg gaacatgagg gaacgccga ggaaagcaaa 800
 gtggcaggga aggaacttgt gccaaattat gggtcagaaa agatggaggt 850
 gttgggttat cacaaggcat cgagtctcct gcattcagt gacatgtggg 900
 ggaagggtg ccatgggc atgacacact cgggactcac ctctggggcc 950
 atcagacagc cgtttccgcc ccgatccacg taccagctgc tgaagggcaa 1000
 ctgcaggccg atgctctcat cagccaggca gcagccaaaa tctgcgatca 1050
 ccagccaggg gcagccgtct gggaaggagc aagcaaagt accatttctc 1100
 ctccctcct tccctctgag aggcctcct atgtccctac taaagccacc 1150
 agcaagacat agctgacagg ggctaattgg tcagtgttgg ccaggaggt 1200
 cagcaaggcc tgagagctga tcagaagggc ctgctgtgcg aacacggaaa 1250
 tgcctccagt aagcacaggc tgcaaatcc ccaggcaaag gactgtgtgg 1300
 ctcaatttaa atcatgttct agtaattgga gctgtcccca agaccaaagg 1350
 agctagagct tggttcaaat gatctccaag ggccttata cccaggaga 1400
 ctttgatttg aatttgaaac cccaaatcca aacctaagaa ccagggtgat 1450
 taagaatcag ttattgccg gtgtggtggc ctgtaatgcc aacatttttg 1500
 gaggccgagg cgggtagatc acctgaggtc aggagttaa gaccagcctg 1550
 gccaacatgg tgaaacccct gtctctacta aaaatacaaa aaaactagcc 1600
 aggcattgtg gtgtgtgcct gtatcccagc tactcgggag gctgagacag 1650
 gagaattact tgaacctggg aggtgaagga ggctgagaca ggagaatcac 1700
 ttcagcctga gcaacacagc gagactctgt ctcagaaaaa ataaaaaaag 1750
 aattatggtt atttgtaa 1768

<210> 344
 <211> 109
 <212> PRT
 <213> Homo Sapien
 <400> 344

Met Leu Trp Trp Leu Val Leu Leu Leu Leu Pro Thr Leu Lys Ser
 1 5 10 15
 Val Phe Cys Ser Leu Val Thr Ser Leu Tyr Leu Pro Asn Thr Glu
 20 25 30
 Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly
 35 40 45
 Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly
 50 55 60
 Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro
 65 70 75
 Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala
 80 85 90
 Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly
 95 100 105
 Arg Arg Arg Asp

<210> 345

<211> 2272

<212> DNA

<213> Homo Sapien

<400> 345

ccgccgccgc agccgctacc gccgctgcag ccgctttccg cggcctgggc 50
 ctctcgccgt cagcatgcca caagccttca agcccgggga cttggtgttc 100
 gctaagatga agggctaccc tcaactggcct gccaggatcg acgacatcgc 150
 ggatggcgcc gtgaagcccc caccacaaca gtaccccatc tttttctttg 200
 gcacacacga aacagccttc ctgggaccca aggacctgtt cccctacgac 250
 aaatgtaaag acaagtacgg gaagcccaac aagaggaaag gcttcaatga 300
 agggctgtgg gagatccaga acaaccccca cgccagctac agcgccctc 350
 cgccagttag ctctccgac agcgaggccc ccgaggccaa ccccgccgac 400
 ggcagttagc ctgacgagga cgatgaggac cgggggggtca tggccgtcac 450
 agcggtaacc gccacagctg ccagcgacag gatggagagc gactcagact 500
 cagacaagag tagcgacaac agtggcctga agaggaagac gcctgcgcta 550
 aagatgtcgg tctcgaaacg agcccgaaag gcctccagcg acctggatca 600
 ggccagcgtg tccccatccg aagaggagaa ctcggaagac tcattctgagt 650
 cggagaagac cagcgaccag gacttcacac ctgagaagaa agcagcggtc 700

gcagagcaga gaactgtggg gaacgctgtg ctgtttgtat ttgttccctt 2200
 ggggtttttt ttcttgcta atttctgtga tttccaacca acatgaaatg 2250
 actataaacg gttttttaat ga 2272

<210> 346
 <211> 671
 <212> PRT
 <213> Homo Sapien

<400> 346
 Met Pro His Ala Phe Lys Pro Gly Asp Leu Val Phe Ala Lys Met
 1 5 10 15
 Lys Gly Tyr Pro His Trp Pro Ala Arg Ile Asp Asp Ile Ala Asp
 20 25 30
 Gly Ala Val Lys Pro Pro Pro Asn Lys Tyr Pro Ile Phe Phe Phe
 35 40 45
 Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro
 50 55 60
 Tyr Asp Lys Cys Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys
 65 70 75
 Gly Phe Asn Glu Gly Leu Trp Glu Ile Gln Asn Asn Pro His Ala
 80 85 90
 Ser Tyr Ser Ala Pro Pro Pro Val Ser Ser Ser Asp Ser Glu Ala
 95 100 105
 Pro Glu Ala Asn Pro Ala Asp Gly Ser Asp Ala Asp Glu Asp Asp
 110 115 120
 Glu Asp Arg Gly Val Met Ala Val Thr Ala Val Thr Ala Thr Ala
 125 130 135
 Ala Ser Asp Arg Met Glu Ser Asp Ser Asp Ser Asp Lys Ser Ser
 140 145 150
 Asp Asn Ser Gly Leu Lys Arg Lys Thr Pro Ala Leu Lys Met Ser
 155 160 165
 Val Ser Lys Arg Ala Arg Lys Ala Ser Ser Asp Leu Asp Gln Ala
 170 175 180
 Ser Val Ser Pro Ser Glu Glu Glu Asn Ser Glu Ser Ser Ser Glu
 185 190 195
 Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr Pro Glu Lys Lys Ala
 200 205 210
 Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly Gly Arg Lys Lys
 215 220 225
 Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys Ala Asp Ser

aactgctagc aaaatctgag gaaacataaa ttcttctgaa gaatcatagg 3500
aagagtagac attttattta taaccaatga tatttcagta tatattttct 3550
ctctttttaa aaatatttat catactctgt atattatttc tttttactgc 3600
ctttattctc tctgtatat tggattttgt gatttatattt gagtgaatag 3650
gagaaaacaa tatataacac acagagaatt aagaaaatga catttctggg 3700
gagtggggat atatatattgt tgaataacag aacgagtgt aaattttaac 3750
aacggaaagg gttaaattaa ctctttgaca tcttcactca accttttctc 3800
attgctgagt taatctgttg taattgtagt attgtttttg taatttaaca 3850
ataaataagc ctgctacatg t 3871

<210> 348

<211> 777

<212> PRT

<213> Homo Sapien

<400> 348

Met	Asn	Ala	Asn	Lys	Asp	Glu	Arg	Leu	Lys	Ala	Arg	Ser	Gln	Asp	1	5	10	15
Phe	His	Leu	Phe	Pro	Ala	Leu	Met	Met	Leu	Ser	Met	Thr	Met	Leu	20	25	30	
Phe	Leu	Pro	Val	Thr	Gly	Thr	Leu	Lys	Gln	Asn	Ile	Pro	Arg	Leu	35	40	45	
Lys	Leu	Thr	Tyr	Lys	Asp	Leu	Leu	Leu	Ser	Asn	Ser	Cys	Ile	Pro	50	55	60	
Phe	Leu	Gly	Ser	Ser	Glu	Gly	Leu	Asp	Phe	Gln	Thr	Leu	Leu	Leu	65	70	75	
Asp	Glu	Glu	Arg	Gly	Arg	Leu	Leu	Leu	Gly	Ala	Lys	Asp	His	Ile	80	85	90	
Phe	Leu	Leu	Ser	Leu	Val	Asp	Leu	Asn	Lys	Asn	Phe	Lys	Lys	Ile	95	100	105	
Tyr	Trp	Pro	Ala	Ala	Lys	Glu	Arg	Val	Glu	Leu	Cys	Lys	Leu	Ala	110	115	120	
Gly	Lys	Asp	Ala	Asn	Thr	Glu	Cys	Ala	Asn	Phe	Ile	Arg	Val	Leu	125	130	135	
Gln	Pro	Tyr	Asn	Lys	Thr	His	Ile	Tyr	Val	Cys	Gly	Thr	Gly	Ala	140	145	150	
Phe	His	Pro	Ile	Cys	Gly	Tyr	Ile	Asp	Leu	Gly	Val	Tyr	Lys	Glu	155	160	165	
Asp	Ile	Ile	Phe	Lys	Leu	Asp	Thr	His	Asn	Leu	Glu	Ser	Gly	Arg				

				170					175					180
Leu	Lys	Cys	Pro	Phe 185	Asp	Pro	Gln	Gln	Pro 190	Phe	Ala	Ser	Val	Met 195
Thr	Asp	Glu	Tyr	Leu 200	Tyr	Ser	Gly	Thr	Ala 205	Ser	Asp	Phe	Leu	Gly 210
Lys	Asp	Thr	Ala	Phe 215	Thr	Arg	Ser	Leu	Gly 220	Pro	Thr	His	Asp	His 225
His	Tyr	Ile	Arg	Thr 230	Asp	Ile	Ser	Glu	His 235	Tyr	Trp	Leu	Asn	Gly 240
Ala	Lys	Phe	Ile	Gly 245	Thr	Phe	Phe	Ile	Pro 250	Asp	Thr	Tyr	Asn	Pro 255
Asp	Asp	Asp	Lys	Ile 260	Tyr	Phe	Phe	Phe	Arg 265	Glu	Ser	Ser	Gln	Glu 270
Gly	Ser	Thr	Ser	Asp 275	Lys	Thr	Ile	Leu	Ser 280	Arg	Val	Gly	Arg	Val 285
Cys	Lys	Asn	Asp	Val 290	Gly	Gly	Gln	Arg	Ser 295	Leu	Ile	Asn	Lys	Trp 300
Thr	Thr	Phe	Leu	Lys 305	Ala	Arg	Leu	Ile	Cys 310	Ser	Ile	Pro	Gly	Ser 315
Asp	Gly	Ala	Asp	Thr 320	Tyr	Phe	Asp	Glu	Leu 325	Gln	Asp	Ile	Tyr	Leu 330
Leu	Pro	Thr	Arg	Asp 335	Glu	Arg	Asn	Pro	Val 340	Val	Tyr	Gly	Val	Phe 345
Thr	Thr	Thr	Ser	Ser 350	Ile	Phe	Lys	Gly	Ser 355	Ala	Val	Cys	Val	Tyr 360
Ser	Met	Ala	Asp	Ile 365	Arg	Ala	Val	Phe	Asn 370	Gly	Pro	Tyr	Ala	His 375
Lys	Glu	Ser	Ala	Asp 380	His	Arg	Trp	Val	Gln 385	Tyr	Asp	Gly	Arg	Ile 390
Pro	Tyr	Pro	Arg	Pro 395	Gly	Thr	Cys	Pro	Ser 400	Lys	Thr	Tyr	Asp	Pro 405
Leu	Ile	Lys	Ser	Thr 410	Arg	Asp	Phe	Pro	Asp 415	Asp	Val	Ile	Ser	Phe 420
Ile	Lys	Arg	His	Ser 425	Val	Met	Tyr	Lys	Ser 430	Val	Tyr	Pro	Val	Ala 435
Gly	Gly	Pro	Thr	Phe 440	Lys	Arg	Ile	Asn	Val 445	Asp	Tyr	Arg	Leu	Thr 450
Gln	Ile	Val	Val	Asp 455	His	Val	Ile	Ala	Glu 460	Asp	Gly	Gln	Tyr	Asp 465

755

760

765

Arg Asp Leu Asp Glu Leu Pro Arg Ala Val Ala Thr
770 775

<210> 349

<211> 3934

<212> DNA

<213> Homo Sapien

<400> 349

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agacctgaag ctgtttcttc aggagcctgg tgtattttcc cccacccac 150
ctcagcagtt tcagccagca gggactgac aggtgtgtgt cctggagtgg 200
ggagcagaag gcgtggctgg caagagtggc ctggagaaag aggttcagcg 250
cttgaccagc cgagctgccc gtgactacaa gatccagaac catgggcatc 300
gggtgaggtg ggggggcaca ggtgtcatgt gcaccttctt gtctcagcaa 350
gaagagctga gagaggggat cttggagcca ttgaggggtgt catggagcta 400
cagaggggag ggaaaggtat ttttaaggtaa cagtgtggca caatagttaa 450
gagcacagtt tttggagcta gaccgacata ggttcaaatt ctcttctgtt 500
gcttcctagt tctgtagccc caggtaaggg agtgacttaa cctctctgga 550
cttcaatttc ctcatcacta aagtagggcc aataatagca cccacctcat 600
agggaagatt aaatgacata atgtatgtga tgcaactagc aaagtaccag 650
tcccatagta agtcatgccc cacagtatit ccacccaccc ctgttctctg 700
ccttcccaac caggtactgc aacgactgga gcagaggcgg cagcaggctt 750
cagagcggga ggctccaagc atagaacaga ggttacagga agtgcgagag 800
agcatccgcc gggcacaggt gagccaggtg aagggggctg cccggctggc 850
cctgctgcag ggggctggct tagatgtgga gcgctggctg aagccagcca 900
tgaccagggc ccaggatgag gtggagcagg agcggcggct cagtgaggct 950
cggctgtccc agagggacct ctctccaacc gctgaggatg ctgagctttc 1000
tgacttttgag gaatgtgagg agacgggaga gctctttgag gagcctgccc 1050
cccaagccct ggccacgagg gccctccctt gccctgcaca cgtggtatit 1100
cgctatcagg cagggcgtga ggatgagctg acaatcacgg agggtgagtg 1150
gctggaggtc atagaggagg gagatgctga cgaatgggtc aaggctcgga 1200

Met	Gln	Leu	Ala	Lys	Tyr	Gln	Ser	His	Ser	Lys	Ser	Cys	Pro	Thr	1	5	10	15
Val	Phe	Pro	Pro	Thr	Pro	Val	Leu	Cys	Leu	Pro	Asn	Gln	Val	Leu	20	25	30	
Gln	Arg	Leu	Glu	Gln	Arg	Arg	Gln	Gln	Ala	Ser	Glu	Arg	Glu	Ala	35	40	45	
Pro	Ser	Ile	Glu	Gln	Arg	Leu	Gln	Glu	Val	Arg	Glu	Ser	Ile	Arg	50	55	60	
Arg	Ala	Gln	Val	Ser	Gln	Val	Lys	Gly	Ala	Ala	Arg	Leu	Ala	Leu	65	70	75	
Leu	Gln	Gly	Ala	Gly	Leu	Asp	Val	Glu	Arg	Trp	Leu	Lys	Pro	Ala	80	85	90	
Met	Thr	Gln	Ala	Gln	Asp	Glu	Val	Glu	Gln	Glu	Arg	Arg	Leu	Ser	95	100	105	
Glu	Ala	Arg	Leu	Ser	Gln	Arg	Asp	Leu	Ser	Pro	Thr	Ala	Glu	Asp	110	115	120	
Ala	Glu	Leu	Ser	Asp	Phe	Glu	Glu	Cys	Glu	Glu	Thr	Gly	Glu	Leu	125	130	135	
Phe	Glu	Glu	Pro	Ala	Pro	Gln	Ala	Leu	Ala	Thr	Arg	Ala	Leu	Pro	140	145	150	
Cys	Pro	Ala	His	Val	Val	Phe	Arg	Tyr	Gln	Ala	Gly	Arg	Glu	Asp	155	160	165	
Glu	Leu	Thr	Ile	Thr	Glu	Gly	Glu	Trp	Leu	Glu	Val	Ile	Glu	Glu	170	175	180	
Gly	Asp	Ala	Asp	Glu	Trp	Val	Lys	Ala	Arg	Asn	Gln	His	Gly	Glu	185	190	195	
Val	Gly	Phe	Val	Pro	Glu	Arg	Tyr	Leu	Asn	Phe	Pro	Asp	Leu	Ser	200	205	210	
Leu	Pro	Glu	Ser	Ser	Gln	Asp	Ser	Asp	Asn	Pro	Cys	Gly	Ala	Glu	215	220	225	
Pro	Thr	Ala	Phe	Leu	Ala	Gln	Ala	Leu	Tyr	Ser	Tyr	Thr	Gly	Gln	230	235	240	
Ser	Ala	Glu	Glu	Leu	Ser	Phe	Pro	Glu	Gly	Ala	Leu	Ile	Arg	Leu	245	250	255	
Leu	Pro	Arg	Ala	Gln	Asp	Gly	Val	Asp	Asp	Gly	Phe	Trp	Arg	Gly	260	265	270	
Glu	Phe	Gly	Gly	Arg	Val	Gly	Val	Phe	Pro	Ser	Leu	Leu	Val	Glu	275	280	285	
Glu	Leu	Leu	Gly	Pro	Pro	Gly	Pro	Pro	Glu	Leu	Ser	Asp	Pro	Glu				

	290		295		300
Gln Met Leu Pro Ser Pro Ser Pro Pro Ser Phe Ser Pro Pro Ala					
	305		310		315
Pro Thr Ser Val Leu Asp Gly Pro Pro Ala Pro Val Leu Pro Gly					
	320		325		330
Asp Lys Ala Leu Asp Phe Pro Gly Phe Leu Asp Met Met Ala Pro					
	335		340		345
Arg Leu Arg Pro Met Arg Pro Pro Pro Pro Pro Pro Ala Lys Ala					
	350		355		360
Pro Asp Pro Gly His Pro Asp Pro Leu Thr					
	365		370		

<210> 351

<211> 4407

<212> DNA

<213> Homo Sapien

<400> 351

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agacagagac aaaggcacag cggaagaagg cagagacagg gcaggcacag 100

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agacacaggc agggagagac aaagatccag gaaaggaggg ctgaggagga 200

gagtttgagg aagccagacc cctgggcacc tctcccaagc ccaaggacta 250

agttttctcc atttccttta acggtcctca gcccttctga aaactttgcc 300

tctgaccttg gcaggagtcc aagccccag gctacagaga ggagctttcc 350

aaagctaggg tgtggaggac ttggtgccct agacggcctc agtccctccc 400

agctgcagta ccagtgccat gtcccagaca ggctcgcatc ccgggagggg 450

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cctgggccag gcgcctgagc tgctgggtgg agcagagcct ggcacctacc 800

tgactggcac catcaatgga gatccggagt cgggtggcatc tctgcactgg 850

gatgggggag ccctgttagg cgtgttacia tatcgggggg ctgaactcca 900

Gly His Arg Ser Ile Tyr Leu Ala Leu Lys Leu Pro Asp Gly Ser
725 730 735

Tyr Ala Leu Asn Gly Glu Tyr Thr Leu Met Pro Ser Pro Thr Asp
740 745 750

Val Val Leu Pro Gly Ala Val Ser Leu Arg Tyr Ser Gly Ala Thr
755 760 765

Ala Ala Ser Glu Thr Leu Ser Gly His Gly Pro Leu Ala Gln Pro
770 775 780

Leu Thr Leu Gln Val Leu Val Ala Gly Asn Pro Gln Asp Thr Arg
785 790 795

Leu Arg Tyr Ser Phe Phe Val Pro Arg Pro Thr Pro Ser Thr Pro
800 805 810

Arg Pro Thr Pro Gln Asp Trp Leu His Arg Arg Ala Gln Ile Leu
815 820 825

Glu Ile Leu Arg Arg Arg Pro Trp Ala Gly Arg Lys
830 835

<210> 353

<211> 1174

<212> DNA

<213> Homo Sapien

<400> 353

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cgttgatcac caccatcctg ccgcactggc ggaggacagc gcacgtgggc 200

accaacatcc tcacggccgt gtcctacctg aaagggtctt ggatggagtg 250

tgtgtggcac agcacaggca tctaccagtg ccagatctac cgatccctgc 300

tggcgtgcc ccaagacctc caggctgcc gcgccctcat ggtcatctcc 350

tgctgtctt cgggcatagc ctgcgcctgc gccgtcatcg ggatgaagtg 400

cacgcgtgc gccaaaggga caccgcgcaa gaccaccttt gccatcctcg 450

gcggcaccct cttcatcctg gccggcctcc tgtgcatggt ggccgtctcc 500

tggaccacca acgacgtggt gcagaacttc tacaaccgcg tgctgcccag 550

cggcatgaag tttgagattg gccaggccct gtacctgggc ttcattctct 600

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 ggctgtttat gaaaaaaaaa aaaa 1174

<210> 354

<211> 239

<212> PRT

<213> Homo Sapien

<400> 354

Met	Ala	Ser	Thr	Ala	Val	Gln	Leu	Leu	Gly	Phe	Leu	Leu	Ser	Phe
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Leu	Gly	Met	Val	Gly	Thr	Leu	Ile	Thr	Thr	Ile	Leu	Pro	His	Trp
				20					25					30
Arg	Arg	Thr	Ala	His	Val	Gly	Thr	Asn	Ile	Leu	Thr	Ala	Val	Ser
				35					40					45
Tyr	Leu	Lys	Gly	Leu	Trp	Met	Glu	Cys	Val	Trp	His	Ser	Thr	Gly
				50					55					60
Ile	Tyr	Gln	Cys	Gln	Ile	Tyr	Arg	Ser	Leu	Leu	Ala	Leu	Pro	Gln
				65					70					75
Asp	Leu	Gln	Ala	Ala	Arg	Ala	Leu	Met	Val	Ile	Ser	Cys	Leu	Leu
				80					85					90
Ser	Gly	Ile	Ala	Cys	Ala	Cys	Ala	Val	Ile	Gly	Met	Lys	Cys	Thr
				95					100					105
Arg	Cys	Ala	Lys	Gly	Thr	Pro	Ala	Lys	Thr	Thr	Phe	Ala	Ile	Leu
				110					115					120
Gly	Gly	Thr	Leu	Phe	Ile	Leu	Ala	Gly	Leu	Leu	Cys	Met	Val	Ala
				125					130					135
Val	Ser	Trp	Thr	Thr	Asn	Asp	Val	Val	Gln	Asn	Phe	Tyr	Asn	Pro
				140					145					150
Leu	Leu	Pro	Ser	Gly	Met	Lys	Phe	Glu	Ile	Gly	Gln	Ala	Leu	Tyr
				155					160					165

Leu Gly Phe Ile Ser Ser Ser Leu Ser Leu Ile Gly Gly Thr Leu
170 175 180

Leu Cys Leu Ser Cys Gln Asp Glu Ala Pro Tyr Arg Pro Tyr Gln
185 190 195

Ala Pro Pro Arg Ala Thr Thr Thr Thr Ala Asn Thr Ala Pro Ala
200 205 210

Tyr Gln Pro Pro Ala Ala Tyr Lys Asp Asn Arg Ala Pro Ser Val
215 220 225

Thr Ser Ala Thr His Ser Gly Tyr Arg Leu Asn Asp Tyr Val
230 235

<210> 355
<211> 2121
<212> DNA
<213> Homo Sapien

<400> 355
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cacatgccaa gtggtggcgt tcctcctgtc catcctgggg ctggccggct 150
gcatcgcggc caccgggatg gacatgtgga gcaccagga cctgtacgac 200
aaccctgtca cctccgtgtt ccagtaagaa gggctctgga ggagctgcgt 250
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gacttccagc catgctgcag gcagtgcgag cctgatgat cgtaggcatc 350
gtcctgggtg ccattggcct cctggatatc atctttgccc tgaaatgcat 400
ccgcattggc agcatggagg actctgcaa agccaacatg aactgacct 450
ccgggatcat gttcattgtc tcaggtcttt gtgcaattgc tggagtgtct 500
gtgtttgcca acatgctggt gactaacttc tggatgtcca cagctaacat 550
gtacaccggc atgggtggga tgggtgcagac tggtcagacc aggtacacat 600
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agcctggagg cttcaaggcc agcactggct ttgggtccaa caccaaaaac 800
aagaagatat acgatggagg tgcccgaca gaggacgagg tacaatctta 850
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ggaagaaact ccggagagc tcacccaaaa aacaaggaga tcccatctag 950

	20		25		30
Ser Thr Gln Asp Leu Tyr Asp Asn Pro Val Thr Ser Val Phe Gln	35		40		45
Tyr Glu Gly Leu Trp Arg Ser Cys Val Arg Gln Ser Ser Gly Phe	50		55		60
Thr Glu Cys Arg Pro Tyr Phe Thr Ile Leu Gly Leu Pro Ala Met	65		70		75
Leu Gln Ala Val Arg Ala Leu Met Ile Val Gly Ile Val Leu Gly	80		85		90
Ala Ile Gly Leu Leu Val Ser Ile Phe Ala Leu Lys Cys Ile Arg	95		100		105
Ile Gly Ser Met Glu Asp Ser Ala Lys Ala Asn Met Thr Leu Thr	110		115		120
Ser Gly Ile Met Phe Ile Val Ser Gly Leu Cys Ala Ile Ala Gly	125		130		135
Val Ser Val Phe Ala Asn Met Leu Val Thr Asn Phe Trp Met Ser	140		145		150
Thr Ala Asn Met Tyr Thr Gly Met Gly Gly Met Val Gln Thr Val	155		160		165
Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe Val Gly Trp Val	170		175		180
Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met Cys Ile Ala	185		190		195
Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala Val Ser	200		205		210
Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly Phe	215		220		225
Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile	230		235		240
Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro	245		250		255
Ser Lys His Asp Tyr Val	260				

<210> 357

<211> 2010

<212> DNA

<213> Homo Sapien

<400> 357

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agggctatac tcagaagaaa gataaaagtg tgatctaaga aaaagtgatg 1550
 gtttttaggaa agtgaaaata tttttgtttt tgtatttgaa gaagaatgat 1600
 gcattttgac aagaaatcat atatgtatgg atatatttta ataagtattt 1650
 gagtacagac tttgagggtt catcaatata aataaaagag cagaaaaata 1700
 tgtcttggtt ttcatttgc taccaaaaaa acaacaacaa aaaaagttgt 1750
 cctttgagaa cttcacctgc tcctatgtgg gtacctgagt caaaattgtc 1800
 atttttgttc tgtgaaaaat aaatttcctt cttgtaccat ttctgtttag 1850
 ttttactaaa atctgtaaact actgtatttt tctgtttatt ccaaatttga 1900
 tgaaactgac aatccaattt gaaagtttgt gtcgacgtct gtctagctta 1950
 aatgaatgtg ttctatttgc tttatacatt tatattaata aattgtacat 2000
 ttttctaatt 2010

<210> 358
 <211> 225
 <212> PRT
 <213> Homo Sapien

<400> 358
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 Val Gly Met Val Gly Thr Val Ala Val Thr Val Met Pro Gln Trp
 20 25 30
 Arg Val Ser Ala Phe Ile Glu Asn Asn Ile Val Val Phe Glu Asn
 35 40 45
 Phe Trp Glu Gly Leu Trp Met Asn Cys Val Arg Gln Ala Asn Ile
 50 55 60
 Arg Met Gln Cys Lys Ile Tyr Asp Ser Leu Leu Ala Leu Ser Pro
 65 70 75
 Asp Leu Gln Ala Ala Arg Gly Leu Met Cys Ala Ala Ser Val Met
 80 85 90
 Ser Phe Leu Ala Phe Met Met Ala Ile Leu Gly Met Lys Cys Thr
 95 100 105
 Arg Cys Thr Gly Asp Asn Glu Lys Val Lys Ala His Ile Leu Leu
 110 115 120
 Thr Ala Gly Ile Ile Phe Ile Ile Thr Gly Met Val Val Leu Ile
 125 130 135
 Pro Val Ser Trp Val Ala Asn Ala Ile Ile Arg Asp Phe Tyr Asn
 140 145 150

Ser	Ile	Val	Asn	Val	Ala	Gln	Lys	Arg	Glu	Leu	Gly	Glu	Ala	Leu
			155						160					165
Tyr	Leu	Gly	Trp	Thr	Thr	Ala	Leu	Val	Leu	Ile	Val	Gly	Gly	Ala
			170						175					180
Leu	Phe	Cys	Cys	Val	Phe	Cys	Cys	Asn	Glu	Lys	Ser	Ser	Ser	Tyr
			185						190					195
Arg	Tyr	Ser	Ile	Pro	Ser	His	Arg	Thr	Thr	Gln	Lys	Ser	Tyr	His
			200						205					210
Thr	Gly	Lys	Lys	Ser	Pro	Ser	Val	Tyr	Ser	Arg	Ser	Gln	Tyr	Val
			215						220					225

<210> 359

<211> 742

<212> DNA

<213> Homo Sapien

<400> 359

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tgccctgac cgggctggcg ctgctcctgc tctgtgctg gggcccaggt 150
ggcataagtg gaaataaact caagctgatg cttcaaaaac gagaagcacc 200
tgttccaact aagactaaag tggccgttga tgagaataaa gccaaagaat 250
tccttggcag cctgaagcgc cagaagcggc agctgtggga ccggactcgg 300
cccgaggtgc agcagtggta ccagcagttt ctctacatgg gctttgatga 350
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gacatgaata ctatggcgat tactaccaac gtcactatga tgaagactct 450
gcaattggtc cccggagccc ctacggcttt aggcattggag ccagcgtcaa 500
ctacgatgac tactaaccat gacttgccac acgctgtaca agaagcaaatt 550
agcgattctc ttcattgtat tctaatgcc ttacactact tggttttctga 600
tttgctctat ttcagcagat cttttctacc tactttgtgt gatcaaaaaa 650
gaagagttaa aacaacacat gtaaattgcct tttgatattt catgggaatg 700
cctctcattt aaaaatagaa ataaagcatt ttgttaaaaa ga 742

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<210> 360

<211> 148

<212> PRT

<213> Homo Sapien

<400> 360

Met Ala Ala Ser Pro Ala Arg Pro Ala Val Leu Ala Leu Thr Gly

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Leu Ala Leu Leu Leu Leu Cys Trp Gly Pro Gly Gly Ile Ser			
	20	25	30
Gly Asn Lys Leu Lys Leu Met Leu Gln Lys Arg Glu Ala Pro Val			
	35	40	45
Pro Thr Lys Thr Lys Val Ala Val Asp Glu Asn Lys Ala Lys Glu			
	50	55	60
Phe Leu Gly Ser Leu Lys Arg Gln Lys Arg Gln Leu Trp Asp Arg			
	65	70	75
Thr Arg Pro Glu Val Gln Gln Trp Tyr Gln Gln Phe Leu Tyr Met			
	80	85	90
Gly Phe Asp Glu Ala Lys Phe Glu Asp Asp Ile Thr Tyr Trp Leu			
	95	100	105
Asn Arg Asp Arg Asn Gly His Glu Tyr Tyr Gly Asp Tyr Tyr Gln			
	110	115	120
Arg His Tyr Asp Glu Asp Ser Ala Ile Gly Pro Arg Ser Pro Tyr			
	125	130	135
Gly Phe Arg His Gly Ala Ser Val Asn Tyr Asp Asp Tyr			
	140	145	

<210> 361
 <211> 849
 <212> DNA
 <213> Homo Sapien

<400> 361
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 atgacaaagg cgctactcat ctatttggtc agcagctttc ttgccctaaa 200
 tcaggccagc ctcactcagtc gctgtgactt ggcccaggtg ctgcagctgg 250
 aggacttggg tgggtttgag ggttactccc tgagtgactg gctgtgcctg 300
 gcttttgtgg aaagcaagtt caacatatca aagataaatg aaaatgcgga 350
 tggaagcttt gactatggcc tcttcagat caacagccac tactggtgca 400
 acgattataa gagttactcg gaaaaccttt gccacgtaga ctgtcaagat 450
 ctgctgaatc ccaaccttct tgcaggcatc cactgcgcaa aaaggattgt 500
 gtccggagca cgggggatga acaactgggt agaattggagg ttgcactgtt 550
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agggtgcggg tgcaccgtgg agtcattcca agactcctgt cctcactcag 650
 ggattottca tttctttcttc ctactgcctc cacttcatgt tattttcttc 700
 ccttcccatt tacaactaaa actgaccaga gcccaggaa taaatgggtt 750
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 tgttatttgt aaactgagga ccacaataaa gaaatcttta tatttatcg 849

<210> 362
 <211> 148
 <212> PRT
 <213> Homo Sapien

<400> 362
 Met Thr Lys Ala Leu Leu Ile Tyr Leu Val Ser Ser Phe Leu Ala
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 20 25 30
 Leu Gln Leu Glu Asp Leu Asp Gly Phe Glu Gly Tyr Ser Leu Ser
 35 40 45
 Asp Trp Leu Cys Leu Ala Phe Val Glu Ser Lys Phe Asn Ile Ser
 50 55 60
 Lys Ile Asn Glu Asn Ala Asp Gly Ser Phe Asp Tyr Gly Leu Phe
 65 70 75
 Gln Ile Asn Ser His Tyr Trp Cys Asn Asp Tyr Lys Ser Tyr Ser
 80 85 90
 Glu Asn Leu Cys His Val Asp Cys Gln Asp Leu Leu Asn Pro Asn
 95 100 105
 Leu Leu Ala Gly Ile His Cys Ala Lys Arg Ile Val Ser Gly Ala
 110 115 120
 Arg Gly Met Asn Asn Trp Val Glu Trp Arg Leu His Cys Ser Gly
 125 130 135
 Arg Pro Leu Ser Tyr Trp Leu Thr Gly Cys Arg Leu Arg
 140 145

<210> 363
 <211> 2575
 <212> DNA
 <213> Homo Sapien

<400> 363
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aaggagaaaa ccggggtaaa gggaggggaag caattcaatt tgaagtcctt 200
gtgaatgggc tttcagaagg caattaaaga aatccactca gagaggactt 250
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gttctagcaa catgctccta aggaagcgat acaggcacag accatgcaga 500
ctccagttcc tctgctgct cctgatgctg ggatgcgtcc tgatgatggt 550
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tctggagggc ctgccaccct ttatctcact gcgggaggat cagctgctgg 750
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tctgtttcca tgatgaggcc tggctcactc tctgctggac tgtacacagc 1100
atcctcgaca cagtgccag ggccttctg aaggagatca tctcgtgga 1150
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tgggggtgtg gactggaagc tggatttcca ctgggaacct ttgccagagc 1500
atgtgaggaa ggccctccag tccccataa gccccatcag gagccctgtg 1550
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<210> 365
 <211> 1257
 <212> DNA
 <213> Homo Sapien

<400> 365
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 cggagcgcgg cggagccaga cgctgaccac gttcctctcc tcggtctcct 100
 ccgcctccag ctccgcgctg cccggcagcc gggagccatg cgaccccagg 150
 gccccgcgcg cccccgcag cggctccgcg gcctcctgct gctcctgctg 200
 ctgcagctgc ccgcgccgtc gagcgccctc gagatcccca aggggaagca 250
 aaaggcgcag ctccggcaga gggagggtgt ggacctgtat aatggaatgt 300
 gcttacaagg gccagcagga gtgcctggtc gagacgggag ccctggggcc 350
 aatgtttatt cgggtacacc tgggatccca ggtcgggatg gattcaaagg 400
 agaaaagggg gaatgtctga gggaaagctt tgaggagtcc tggacaccca 450
 actacaagca gtgttcattg agttcattga attatggcat agatcttggg 500
 aaaattgcgg agtgtacatt taaaaagatg cgttcaaata gtgctctaag 550
 agttttgttc agtggctcac ttcggctaaa atgcagaaat gcatgctgtc 600
 agcgttggta tttcacattc aatggagctg aatgttcagg acctcttccc 650
 attgaagcta taatttat ttggaccaagga agccctgaaa tgaattcaac 700
 aattaatatt catcgactt cttctgtgga aggactttgt gaaggaattg 750
 gtgctggatt agtggatgtt gctatctggg ttggcacttg ttcagattac 800
 ccaaaaggag atgcttctac tggatggaat tcagtttctc gcatcattat 850
 tgaagaacta ccaaaataaa tgctttaatt ttcatttgct acctcttttt 900
 ttattatgcc ttggaatggt tcacttaaat gacattttta ataagtttat 950
 gtatacatct gaatgaaaag caaagctaaa tatgtttaca gaccaaagtg 1000
 tgatttcaca ctgtttttta atctagcatt attcattttg cttcaatcaa 1050
 aagtggtttc aatatttttt ttagttggtt agaatacttt cttcatagtc 1100
 acattctctc aacctataat ttggaatatt gttgtggtct tttgtttttt 1150
 ctcttagtat agcattttta aaaaaatata aaagctacca atctttgtac 1200
 aatttgtaaa tgttaagaat tttttttata tctgttaaat aaaaattatt 1250
 tccaaca 1257

<210> 366
 <211> 243
 <212> PRT
 <213> Homo Sapien

<400> 366

Met	Arg	Pro	Gln	Gly	Pro	Ala	Ala	Ser	Pro	Gln	Arg	Leu	Arg	Gly	1	5	10	15
Leu	Leu	Leu	Leu	Leu	Leu	Leu	Gln	Leu	Pro	Ala	Pro	Ser	Ser	Ala	20	25	30	
Ser	Glu	Ile	Pro	Lys	Gly	Lys	Gln	Lys	Ala	Gln	Leu	Arg	Gln	Arg	35	40	45	
Glu	Val	Val	Asp	Leu	Tyr	Asn	Gly	Met	Cys	Leu	Gln	Gly	Pro	Ala	50	55	60	
Gly	Val	Pro	Gly	Arg	Asp	Gly	Ser	Pro	Gly	Ala	Asn	Val	Ile	Pro	65	70	75	
Gly	Thr	Pro	Gly	Ile	Pro	Gly	Arg	Asp	Gly	Phe	Lys	Gly	Glu	Lys	80	85	90	
Gly	Glu	Cys	Leu	Arg	Glu	Ser	Phe	Glu	Glu	Ser	Trp	Thr	Pro	Asn	95	100	105	
Tyr	Lys	Gln	Cys	Ser	Trp	Ser	Ser	Leu	Asn	Tyr	Gly	Ile	Asp	Leu	110	115	120	
Gly	Lys	Ile	Ala	Glu	Cys	Thr	Phe	Thr	Lys	Met	Arg	Ser	Asn	Ser	125	130	135	
Ala	Leu	Arg	Val	Leu	Phe	Ser	Gly	Ser	Leu	Arg	Leu	Lys	Cys	Arg	140	145	150	
Asn	Ala	Cys	Cys	Gln	Arg	Trp	Tyr	Phe	Thr	Phe	Asn	Gly	Ala	Glu	155	160	165	
Cys	Ser	Gly	Pro	Leu	Pro	Ile	Glu	Ala	Ile	Ile	Tyr	Leu	Asp	Gln	170	175	180	
Gly	Ser	Pro	Glu	Met	Asn	Ser	Thr	Ile	Asn	Ile	His	Arg	Thr	Ser	185	190	195	
Ser	Val	Glu	Gly	Leu	Cys	Glu	Gly	Ile	Gly	Ala	Gly	Leu	Val	Asp	200	205	210	
Val	Ala	Ile	Trp	Val	Gly	Thr	Cys	Ser	Asp	Tyr	Pro	Lys	Gly	Asp	215	220	225	
Ala	Ser	Thr	Gly	Trp	Asn	Ser	Val	Ser	Arg	Ile	Ile	Ile	Glu	Glu	230	235	240	
Leu	Pro	Lys																

<210> 367

<211> 480
 <212> DNA
 <213> Homo Sapien

<400> 367
 gttaaccagc gcagtcctcc gtgcgtcccg cccgccgctg ccctcactcc 50
 cggccaggat ggcatacctgt ctggccctgc gcatggcgct gctgctggtc 100
 tccgggggttc tggccccctgc ggtgctcaca gacgatgttc cacaggagcc 150
 cgtgcccacg ctgtggaacg agccggccga gctgccgctg ggagaaggcc 200
 ccgtggagag caccagcccc ggccgggagc ccgtggacac cggcccccca 250
 gccccaccg tcgcgccagg acccgaggac agcaccgcgc aggagcggct 300
 ggaccagggc ggcgggtcgc tggggccccg cgctatcgcg gccatcgtga 350
 tcgccgccct gctggccacc tgcgtggtgc tggcgctcgt ggtcgtcgcg 400
 ctgagaaaagt tttctgcctc ctgaagcgaa taaagggggc gcgccgggcc 450
 gcggcgcgac tcggcaaaaa aaaaaaaaaa 480

<210> 368
 <211> 121
 <212> PRT
 <213> Homo Sapien

<400> 368
 Met Ala Ser Cys Leu Ala Leu Arg Met Ala Leu Leu Leu Val Ser
 1 5 10 15
 Gly Val Leu Ala Pro Ala Val Leu Thr Asp Asp Val Pro Gln Glu
 20 25 30
 Pro Val Pro Thr Leu Trp Asn Glu Pro Ala Glu Leu Pro Ser Gly
 35 40 45
 Glu Gly Pro Val Glu Ser Thr Ser Pro Gly Arg Glu Pro Val Asp
 50 55 60
 Thr Gly Pro Pro Ala Pro Thr Val Ala Pro Gly Pro Glu Asp Ser
 65 70 75
 Thr Ala Gln Glu Arg Leu Asp Gln Gly Gly Gly Ser Leu Gly Pro
 80 85 90
 Gly Ala Ile Ala Ala Ile Val Ile Ala Ala Leu Leu Ala Thr Cys
 95 100 105
 Val Val Leu Ala Leu Val Val Val Ala Leu Arg Lys Phe Ser Ala
 110 115 120
 Ser

<210> 369
<211> 2134
<212> DNA
<213> Homo Sapien

<400> 369
ggccgttggt tggcgcgagg ctgaagggtg tggcgcgagg agcgtcgttg 50
gttgggccggc ggcgggccgg gacggggcatg gccctgctgc tgtgcctggt 100
gtgcctgacg gcggcgctgg cccacggctg tctgcactgc cacagcaact 150
tctccaagaa gttctccttc taccgccacc atgtgaactt caagtcctgg 200
tggttgggcg acatccccgt gtcagggggc ctgctcaccg actggagcga 250
cgacacgatg aaggagctgc acctggccat ccccgccaag atcacccggg 300
agaagctgga ccaagtggcg acagcagtgt accagatgat ggatcagctg 350
taccagggga agatgtactt ccccggggtat ttccccaacg agctgcgaaa 400
catcttccgg gagcaggtgc acctcatcca gaacgccatc atcgaaaggc 450
acctggcacc aggcagctgg ggaggagggc agctctccag ggagggaccc 500
agcctagcac ctgaaggatc aatgccatca ccccgggggg acctccccta 550
agtagcccc agaggcgctg ggagtgttg caccgccctc cctgaagtt 600
tgctccatct cacgtgggg gtcaacctgg ggaccccttc cctccggggc 650
atggacacac atacatgaaa accaggccgc atcgactgtc agcaccgctg 700
tggcatcttc cagtacgaga ccatctcctg caacaactgc acagactcgc 750
acgtcgctg ctttggctat aactgcgagt agggctcagg catcacacc 800
accctgcca gggccctact gtccctgggg tcccaggctc tccttgagg 850
gggtccccc ccttccacct gggtgtcatc gggtagggcg gggccgtggg 900
ttcagggggc caccacttcc aagcctgtgt cccacaggctc ctggcgag 950
tggaagtcag ctgtccagg cctcctgaac tacataaata actggcacia 1000
gtaagtcccc tcctcaaacc aacacaggca gtgtgtgtat gtgagcacct 1050
cgtgggtgag tatgtgtggg gcacaggctg gctccctcag ctcccacgtc 1100
ctagaggggc tcccaggag gtggaacctc aaccagctc tgcgcaggag 1150
gcggctgcag tccttttctc cctcaaaggc ctccgaccct cagctggagg 1200
cgggcatctt tcctaaagg tcccatagg gtctggttcc accccatccc 1250
aggtctgtgg tcagagcctg ggagggttcc ctacgatgg taggggtgcc 1300

ccatggaggg gctgactgcc ccacattgcc tttcagacag gacacgagca 1350
tgaggttaagg ccgccctgac ctggacttca gggggagggg gtaaaggag 1400
agaggagggg ggctaggggg tcctctagat cagtgggggc actgcaggtg 1450
gggctctccc tatacctggg acacctgctg gatgtcacct ctgcaaccac 1500
acccatgtgg tggtttcatg aacagaccac gctcctctgc cttctcctgg 1550
cctgggacac acagagccac ccggccttg tgagtgaccc agagaaggga 1600
ggcctcgga gaaggggtgc tcgtaagcca acaccagcgt gccggggcct 1650
gcacaccctt cggacatccc aggcacgagg gtgtcgtgga tgtggccaca 1700
cataggacca cacgtcccag ctgggaggag aggcctgggg cccccaggga 1750
gggaggcagg ggggtgggga catggagagc tgaggcagcc tcgtctcccc 1800
gcagcctggt atcgccagcc ttaagggtgc tggagcccc acacttggcc 1850
aacctgacct tggaagatgc tgctgagtgt ctcaagcagc actgacagca 1900
gctgggcctg ccccaggga acgtgggggc ggagactcag ctggacagcc 1950
cctgcctgtc actctggagc tgggctgctg ctgcctcagg accccctctc 2000
cgaccccgga cagagctgag ctggccaggg ccaggagggc gggagggagg 2050
gaatgggggt gggctgtgcg cagcatcagc gcctgggcag gtccgcagag 2100
ctgcgggatg tgattaaagt ccctgatgtt tctc 2134

<210> 370
<211> 157
<212> PRT
<213> Homo Sapien

<400> 370
Met Ala Leu Leu Leu Cys Leu Val Cys Leu Thr Ala Ala Leu Ala
1 5 10 15
His Gly Cys Leu His Cys His Ser Asn Phe Ser Lys Lys Phe Ser
20 25 30
Phe Tyr Arg His His Val Asn Phe Lys Ser Trp Trp Val Gly Asp
35 40 45
Ile Pro Val Ser Gly Ala Leu Leu Thr Asp Trp Ser Asp Asp Thr
50 55 60
Met Lys Glu Leu His Leu Ala Ile Pro Ala Lys Ile Thr Arg Glu
65 70 75
Lys Leu Asp Gln Val Ala Thr Ala Val Tyr Gln Met Met Asp Gln
80 85 90

Leu Tyr Gln Gly Lys Met Tyr Phe Pro Gly Tyr Phe Pro Asn Glu
95 100 105

Leu Arg Asn Ile Phe Arg Glu Gln Val His Leu Ile Gln Asn Ala
110 115 120

Ile Ile Glu Arg His Leu Ala Pro Gly Ser Trp Gly Gly Gly Gln
125 130 135

Leu Ser Arg Glu Gly Pro Ser Leu Ala Pro Glu Gly Ser Met Pro
140 145 150

Ser Pro Arg Gly Asp Leu Pro
155

<210> 371
<211> 1321
<212> DNA
<213> Homo Sapien

<400> 371
gccggctgtg cagagacgcc atgtaccggc tcctgtcagc agtgactgcc 50
cgggctgccg cccccggggg cttggcctca agctgcggac gacgcggggg 100
ccatcagcgc gccgggctgc cgctctcgg ccacggctgg gtcggggggc 150
tcgggctggg gctggggctg gcgctcgggg tgaagctggc aggtgggctg 200
aggggcgcgg ccccggcgca gtccccgcg gcccccgacc ctgaggcgtc 250
gcctctggcc gagccgccac aggagcagtc cctcgccccg tgggtctccgc 300
agacccccgc gccgccctgc tccagggtgt tcgccagagc catcgagagc 350
agccgcgacc tgctgcacag gatcaaggat gaggtgggcg caccgggcat 400
agtggttgga gtttctgtag atggaaaaga agtctgggtca gaaggtttag 450
gttatgtcta tggtgagaac cgtgtacat gtaaaccaga gacagttatg 500
cgaattgcta gcatcagcaa aagtctcacc atgggttgctc ttgccaaatt 550
gtgggaagca gggaaactgg atcttgatat tccagtacaa cattatgttc 600
ccgaattccc agaaaaagaa tatgaagggtg aaaagggtttc tgtcacaaca 650
agattactga tttcccatth aagtgggaatt cgtcattatg aaaaggacat 700
aaaaaagggtg aaagaagaga aagcttataa agccttgaag atgatgaaag 750
agaatgttgc atttgagcaa gaaaaagaag gcaaaagtaa tgaaaagaat 800
gattttacta aattttaaac agagcaggag aatgaagcca aatgccggaa 850
ttcaaacctt ggcaagaaaa agaattgattt tgaacaaggc gaattatatt 900
tgagagaaaa gtttgaaaat tcaattgaat ccctaagatt atttaaaaat 950

gatcctttgt tcttcaaacc tggtagtcag tttttgtatt caacttttgg 1000
ctatacccta ctggcagcca tagtagagag agcttcagga tgtaaattatt 1050
tggtactatat gcagaaaata ttccatgact tggatatgct gacgactgtg 1100
caggaagaaa acgagccagt gattttacaat agagcaaggt aaatgaatac 1150
cttctgctgt gtctagctat atcgcatctt aacactatctt tattaattaa 1200
aagtcaaatt ttctttgttt ccattccaaa atcaacctgc cacattttgg 1250
gagcttttct acatgtctgt tttctcatct gtaaagtgaa ggaagtaaaa 1300
catgtttata aagtaaaaaa a 1321

<210> 372

<211> 373

<212> PRT

<213> Homo Sapien

<400> 372

Met	Tyr	Arg	Leu	Leu	Ser	Ala	Val	Thr	Ala	Arg	Ala	Ala	Ala	Pro	1	5	10	15
Gly	Gly	Leu	Ala	Ser	Ser	Cys	Gly	Arg	Arg	Gly	Val	His	Gln	Arg	20	25	30	
Ala	Gly	Leu	Pro	Pro	Leu	Gly	His	Gly	Trp	Val	Gly	Gly	Leu	Gly	35	40	45	
Leu	Gly	Leu	Gly	Leu	Ala	Leu	Gly	Val	Lys	Leu	Ala	Gly	Gly	Leu	50	55	60	
Arg	Gly	Ala	Ala	Pro	Ala	Gln	Ser	Pro	Ala	Ala	Pro	Asp	Pro	Glu	65	70	75	
Ala	Ser	Pro	Leu	Ala	Glu	Pro	Pro	Gln	Glu	Gln	Ser	Leu	Ala	Pro	80	85	90	
Trp	Ser	Pro	Gln	Thr	Pro	Ala	Pro	Pro	Cys	Ser	Arg	Cys	Phe	Ala	95	100	105	
Arg	Ala	Ile	Glu	Ser	Ser	Arg	Asp	Leu	Leu	His	Arg	Ile	Lys	Asp	110	115	120	
Glu	Val	Gly	Ala	Pro	Gly	Ile	Val	Val	Gly	Val	Ser	Val	Asp	Gly	125	130	135	
Lys	Glu	Val	Trp	Ser	Glu	Gly	Leu	Gly	Tyr	Ala	Asp	Val	Glu	Asn	140	145	150	
Arg	Val	Pro	Cys	Lys	Pro	Glu	Thr	Val	Met	Arg	Ile	Ala	Ser	Ile	155	160	165	
Ser	Lys	Ser	Leu	Thr	Met	Val	Ala	Leu	Ala	Lys	Leu	Trp	Glu	Ala	170	175	180	

Gly	Lys	Leu	Asp	Leu	Asp	Ile	Pro	Val	Gln	His	Tyr	Val	Pro	Glu	
				185					190					195	
Phe	Pro	Glu	Lys	Glu	Tyr	Glu	Gly	Glu	Lys	Val	Ser	Val	Thr	Thr	
				200					205					210	
Arg	Leu	Leu	Ile	Ser	His	Leu	Ser	Gly	Ile	Arg	His	Tyr	Glu	Lys	
				215					220					225	
Asp	Ile	Lys	Lys	Val	Lys	Glu	Glu	Lys	Ala	Tyr	Lys	Ala	Leu	Lys	
				230					235					240	
Met	Met	Lys	Glu	Asn	Val	Ala	Phe	Glu	Gln	Glu	Lys	Glu	Gly	Lys	
				245					250					255	
Ser	Asn	Glu	Lys	Asn	Asp	Phe	Thr	Lys	Phe	Lys	Thr	Glu	Gln	Glu	
				260					265					270	
Asn	Glu	Ala	Lys	Cys	Arg	Asn	Ser	Lys	Pro	Gly	Lys	Lys	Lys	Asn	
				275					280					285	
Asp	Phe	Glu	Gln	Gly	Glu	Leu	Tyr	Leu	Arg	Glu	Lys	Phe	Glu	Asn	
				290					295					300	
Ser	Ile	Glu	Ser	Leu	Arg	Leu	Phe	Lys	Asn	Asp	Pro	Leu	Phe	Phe	
				305					310					315	
Lys	Pro	Gly	Ser	Gln	Phe	Leu	Tyr	Ser	Thr	Phe	Gly	Tyr	Thr	Leu	
				320					325					330	
Leu	Ala	Ala	Ile	Val	Glu	Arg	Ala	Ser	Gly	Cys	Lys	Tyr	Leu	Asp	
				335					340					345	
Tyr	Met	Gln	Lys	Ile	Phe	His	Asp	Leu	Asp	Met	Leu	Thr	Thr	Val	
				350					355					360	
Gln	Glu	Glu	Asn	Glu	Pro	Val	Ile	Tyr	Asn	Arg	Ala	Arg			
				365					370						

<210> 373

<211> 1021

<212> DNA

<213> Homo Sapien

<400> 373

gactacgggg agagagagga gaccaggaca gctgctgaga cctctaagaa 50

gtccagatac taagagcaaa gatgtttcaa actggggggcc tcattgtctt 100

ctacgggctg ttagcccaga ccatggccca gtttggaggc ctgcccgtgc 150

ccctggacca gaccctgccc ttgaatgtga atccagccct gcccttgagt 200

cccacaggtc ttgcaggaag cttgacaaat gccctcagca atggcctgct 250

gtctgggggc ctgttgggca ttctggaaaa ccttccgctc ctggacatcc 300

tgaagcctgg aggaggtact tctggtggcc tccttggggg actgcttgga 350

Val Gln Ser Pro Asp Gly His Arg Leu Tyr Val Thr Ile Pro Leu
125 130 135

Gly Ile Lys Leu Gln Val Asn Thr Pro Leu Val Gly Ala Ser Leu
140 145 150

Leu Arg Leu Ala Val Lys Leu Asp Ile Thr Ala Glu Ile Leu Ala
155 160 165

Val Arg Asp Lys Gln Glu Arg Ile His Leu Val Leu Gly Asp Cys
170 175 180

Thr His Ser Pro Gly Ser Leu Gln Ile Ser Leu Leu Asp Gly Leu
185 190 195

Gly Pro Leu Pro Ile Gln Gly Leu Leu Asp Ser Leu Thr Gly Ile
200 205 210

Leu Asn Lys Val Leu Pro Glu Leu Val Gln Gly Asn Val Cys Pro
215 220 225

Leu Val Asn Glu Val Leu Arg Gly Leu Asp Ile Thr Leu Val His
230 235 240

Asp Ile Val Asn Met Leu Ile His Gly Leu Gln Phe Val Ile Lys
245 250 255

Val

<210> 375
<211> 1449
<212> DNA
<213> Homo Sapien

<400> 375
agttctgaga aagaaggaaa taaacacagg caccaaacca ctatcctaag 50
ttgactgtcc tttaaataatg tcaagatcca gacttttcag tgtcacctca 100
gcgatctcaa cgatagggat cttgtgtttg ccgctattcc agttggtgct 150
ctcggaccta ccatgcgaag aagatgaaat gtgtgtaaat tataatgacc 200
aacaccctaa tggctggtat atctggatcc tctgctgct ggttttggtg 250
gcagctcttc tctgtggagc tgtggtcctc tgcctccagt gctggctgag 300
gagacccga attgattctc acaggcgac catggcagtt tttgctgttg 350
gagacttgga ctctatttat gggacagaag cagctgtgag tccaactgtt 400
ggaattcacc ttcaaactca aaccctgac ctatatcctg ttctgctcc 450
atgttttggc cctttaggct cccacctcc atatgaagaa attgtaaaaa 500
caacctgatt ttaggtgtgg attatcaatt taaagtatta acgacatctg 550

taattccaaa acatcaaatt taggaatagt tatttcagtt gttggaaatg 600
tccagagatc tattcatata gtctgaggaa ggacaattcg aaaaagaat 650
ggatgttgga aaaaattttg gtcatggaga tgtttaaata gttaaagtagc 700
aggcttttga tgtgtcactg ctgtatcata cttttatgct acacaaccaa 750
attaatgctt ctccactagt atccaaacag gcaacaatta ggtgctggaa 800
gtagtttcca tcacatttag gactccactg cagtatacag cacaccattt 850
tctgctttta actctttcct agcatggggg ccataaaaaat tattataatt 900
taacaatagc ccaagccgag aatccaacat gtccagaacc agaaccagaa 950
agatagtatt tgaatgaagg tgaggggaga gagtaggaaa aagaaaagtt 1000
tgagagtgaa gggtaaagga taaatgaaga ggaaaaggaa aagattacaa 1050
gtctcagcaa aaacaagagg ttttatgccc caacctgaag aggaagaaat 1100
tgtagataga aggtgaagga gattgctgaa gatatagagc acatataatg 1150
ccaacacggg gagaaaagaa aatttcccct tttacagtaa tgaatgtggc 1200
ctccatagtc catagtgttt ctctggagcc tcagggttg gcatttattg 1250
cagcatcatg ctaagaacct tcggcatagg tatctgttcc catgaggact 1300
gcagaagtag caatgagaca tcttcaagtg gcattttggc agtggccatc 1350
agcaggggga cagacaaaaa catccatcac agatgacata tgatcttcag 1400
ctgacaaatt tgttgaacaa aacaataaac atcaatagat atctaaaaa 1449

<210> 376

<211> 146

<212> PRT

<213> Homo Sapien

<400> 376

Met	Ser	Arg	Ser	Arg	Leu	Phe	Ser	Val	Thr	Ser	Ala	Ile	Ser	Thr
1				5					10					15
Ile	Gly	Ile	Leu	Cys	Leu	Pro	Leu	Phe	Gln	Leu	Val	Leu	Ser	Asp
			20						25					30
Leu	Pro	Cys	Glu	Glu	Asp	Glu	Met	Cys	Val	Asn	Tyr	Asn	Asp	Gln
			35						40					45
His	Pro	Asn	Gly	Trp	Tyr	Ile	Trp	Ile	Leu	Leu	Leu	Leu	Val	Leu
			50						55					60
Val	Ala	Ala	Leu	Leu	Cys	Gly	Ala	Val	Val	Leu	Cys	Leu	Gln	Cys
			65						70					75
Trp	Leu	Arg	Arg	Pro	Arg	Ile	Asp	Ser	His	Arg	Arg	Thr	Met	Ala

	80		85		90
Val Phe Ala Val Gly Asp Leu Asp Ser Ile Tyr Gly Thr Glu Ala					
	95		100		105
Ala Val Ser Pro Thr Val Gly Ile His Leu Gln Thr Gln Thr Pro					
	110		115		120
Asp Leu Tyr Pro Val Pro Ala Pro Cys Phe Gly Pro Leu Gly Ser					
	125		130		135
Pro Pro Pro Tyr Glu Glu Ile Val Lys Thr Thr					
	140		145		

<210> 377
 <211> 1505
 <212> DNA
 <213> Homo Sapien

<400> 377
 cgcgatcgg acccaagcag gtcggcggcg gcggcaggag agcggccggg 50
 cgtcagctcc tcgacccccg tgtcgggcta gtccagcgag gcggacgggc 100
 ggcgtgggcc catggccagg cccggcatgg agcgggtggcg cgaccggctg 150
 gcgctggtga cgggggcctc ggggggcata ggcgcggcgg tggccccggc 200
 cctggtccag cagggactga aggtggtggg ctgcgcccgc actgtgggca 250
 acatcgagga gctggetgct gaatgtaaga gtgcaggcta ccccgggact 300
 ttgatccccct acagatgtga cctatcaaat gaagaggaca tcctctccat 350
 gttctcagct atccgttctc agcacagcgg tgtagacatc tgcataca 400
 atgctggctt ggcccggcct gacaccctgc tctcaggcag caccagtgg 450
 tggaaggaca tgttcaatgt gaacgtgctg gccctcagca tctgcacacg 500
 ggaagcctac cagtccatga aggagcggaa tgtggacgat gggcacatca 550
 ttaacatcaa tagcatgtct ggccaccgag tggtacccct gtctgtgacc 600
 cacttctata gtgccaccaa gtatgccgtc actgcgctga cagagggact 650
 gaggcaagag cttcgggagg ccagaccca catccgagcc acgtgcatct 700
 ctccagggtg ggtggagaca caattcgctt tcaaactcca cgacaaggac 750
 cctgagaagg cagctgccac ctatgagcaa atgaagtgtc tcaaaccoga 800
 ggatgtggcc gaggtgtgta tctacgtcct cagcaccccc gcacacatcc 850
 agattggaga catccagatg aggccacgg agcaggtgac ctagtgactg 900
 tgggagctcc tccttcctc cccacccttc atgggttgcc tcctgcctct 950

ggatttttagg tgttgatttc tggatcacgg gataccactt cctgtccaca 1000
 ccccgaccag gggctagaaa atttgtttga gatttttata tcatcttgtc 1050
 aaattgcttc agttgtaaag gtgaaaaatg ggctggggaa aggaggtggt 1100
 gtccctaatt gttttacttg ttaacttggt cttgtgcccc tgggcacttg 1150
 gcctttgtct gctctcagtg tcttcccttt gacatgggaa aggagttgtg 1200
 gccaaaatcc ccatcttctt gcacctcaac gtctgtggct cagggtggg 1250
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 ccttctcggc tccccagccc agtcttggt tcttggtccc tctggggtc 1400
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 aaaaa 1505

<210> 378
 <211> 260
 <212> PRT
 <213> Homo Sapien

<400> 378
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 Val Thr Gly Ala Ser Gly Gly Ile Gly Ala Ala Val Ala Arg Ala
 20 25 30
 Leu Val Gln Gln Gly Leu Lys Val Val Gly Cys Ala Arg Thr Val
 35 40 45
 Gly Asn Ile Glu Glu Leu Ala Ala Glu Cys Lys Ser Ala Gly Tyr
 50 55 60
 Pro Gly Thr Leu Ile Pro Tyr Arg Cys Asp Leu Ser Asn Glu Glu
 65 70 75
 Asp Ile Leu Ser Met Phe Ser Ala Ile Arg Ser Gln His Ser Gly
 80 85 90
 Val Asp Ile Cys Ile Asn Asn Ala Gly Leu Ala Arg Pro Asp Thr
 95 100 105
 Leu Leu Ser Gly Ser Thr Ser Gly Trp Lys Asp Met Phe Asn Val
 110 115 120
 Asn Val Leu Ala Leu Ser Ile Cys Thr Arg Glu Ala Tyr Gln Ser
 125 130 135
 Met Lys Glu Arg Asn Val Asp Asp Gly His Ile Ile Asn Ile Asn

140	145	150
Ser Met Ser Gly His Arg Val Leu Pro Leu Ser Val Thr His Phe		
155	160	165
Tyr Ser Ala Thr Lys Tyr Ala Val Thr Ala Leu Thr Glu Gly Leu		
170	175	180
Arg Gln Glu Leu Arg Glu Ala Gln Thr His Ile Arg Ala Thr Cys		
185	190	195
Ile Ser Pro Gly Val Val Glu Thr Gln Phe Ala Phe Lys Leu His		
200	205	210
Asp Lys Asp Pro Glu Lys Ala Ala Ala Thr Tyr Glu Gln Met Lys		
215	220	225
Cys Leu Lys Pro Glu Asp Val Ala Glu Ala Val Ile Tyr Val Leu		
230	235	240
Ser Thr Pro Ala His Ile Gln Ile Gly Asp Ile Gln Met Arg Pro		
245	250	255
Thr Glu Gln Val Thr		
260		

<210> 379

<211> 2340

<212> DNA

<213> Homo Sapien

<400> 379

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gacgcagctg acgcccgtt attagctctc gctgcgtcgc cccggctcag 150

aagctccgtg gcggcggcga ccgtgacgag aagcccacgg ccagctcagt 200

tctcttctac tttgggagag agagaaagtc agatgcccct tttaaactcc 250

ctcttcaaaa ctcatctcct gggtgactga gttaatagag tggatacaac 300

cttgctgaag atgaagaata tacaatattg aggatatttt tttctttttt 350

ttttcaagtc ttgatttgtg gcttacctca agttaccatt tttcagtcaa 400

gtctgtttgt ttgcttcttc agaaatgttt tttacaatct caagaaaaaa 450

tatgtcccag aaattgagtt tactgttgct tgtatttgga ctcatTTggg 500

gattgatgtt actgcactat acttttcaac aaccaagaca tcaaagcagt 550

gtcaagttac gtgagcaaact actagactta agcaaaagat atgttaaagc 600

tctagcagag gaaaataaga acacagtggg tgctcgagaac ggtgcttcta 650

tggcaggata tgcggatctg aaaagaacaa ttgctgtcct tctggatgac 700
 attttgcaac gattggtgaa gctggagaac aaagttgact atattgttgt 750
 gaatggctca gcagccaaca ccaccaatgg tactagtggg aatttggtgc 800
 cagtaaccac aaataaaaga acgaatgtct cgggcagtat cagatagcag 850
 ttgaaaatca ccttggtgctg ctccatccac tgtggattat atcctatggc 900
 agaaaagctt tataattgct ggcttaggac agagcaatac tttacaataa 950
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 tgtacataaa aatttttaaag ttatttgttt gctttcaggc aagtctgttc 1050
 aatgctgtac tatgtcctta aagagaatth ggtaacttgg ttgatgtggg 1100
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 agtatataac acgttttttg gacaagtga gaatgtttta tcattctgtc 1250
 atttgttctc aatagatgta actgttagac tacggctatt tgaaaaaatg 1300
 tgcttattgt actatatttt gttattccaa ttatgagcag agaaaggaaa 1350
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 taagagtatc ctttatgaaa ttttgaattt gtataacaga tgcattagat 1900
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 accctaactc tgggtaattc tagtataaaa caaattatac ttttatttaa 2050
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tatttattct ctatagtaac tgcttaagtg cagctagctt ctagatttag 2150
 actatataga atttagatat tgtattgttc gtcattataa tatgctacca 2200
 catgtagcaa taattacaat attttattaa aataaatatg tgaaatattg 2250
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 acctttatgt gaagaaatta atttatatgcc attgccaggt 2340

<210> 380
 <211> 140
 <212> PRT
 <213> Homo Sapien

<400> 380
 Met Phe Phe Thr Ile Ser Arg Lys Asn Met Ser Gln Lys Leu Ser
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 Leu Leu Leu Leu Val Phe Gly Leu Ile Trp Gly Leu Met Leu Leu
 20 25 30
 His Tyr Thr Phe Gln Gln Pro Arg His Gln Ser Ser Val Lys Leu
 35 40 45
 Arg Glu Gln Ile Leu Asp Leu Ser Lys Arg Tyr Val Lys Ala Leu
 50 55 60
 Ala Glu Glu Asn Lys Asn Thr Val Asp Val Glu Asn Gly Ala Ser
 65 70 75
 Met Ala Gly Tyr Ala Asp Leu Lys Arg Thr Ile Ala Val Leu Leu
 80 85 90
 Asp Asp Ile Leu Gln Arg Leu Val Lys Leu Glu Asn Lys Val Asp
 95 100 105
 Tyr Ile Val Val Asn Gly Ser Ala Ala Asn Thr Thr Asn Gly Thr
 110 115 120
 Ser Gly Asn Leu Val Pro Val Thr Thr Asn Lys Arg Thr Asn Val
 125 130 135
 Ser Gly Ser Ile Arg
 140

<210> 381
 <211> 1177
 <212> DNA
 <213> Homo Sapien

<400> 381
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 ggtggcctac accatcatgt cctcccacc ctcccttgac tgcgggccgt 100
 tcaggtgcag agtctcagtt gcccgggagc acctcccctc ccgaggcagt 150

ctgctcagag ggcctcggcc cagaattcca gttctggttt catgccagcc 200
 tgtaaaaggc catggaactt tgggtgaatc accgatgcc ttttaagagg 250
 ttttctgcc ggatggaaat gttaggctgt tctgtgtctg cgctgttcat 300
 ttcagtagcc accagccacc tgtggccggt gagtgcttga aatgaggaac 350
 tgagaaaatt aatttctcat gtatttttct catttattta ttaattttta 400
 actgatagtt gtacatatat gggggtacat gtgatatttg gatacatgta 450
 tacaatatat aatgatcaaa tcagggtaac tgggatatcc atcacatcaa 500
 acatttattt tttattcttt ttagacagag tctcactctg tcaccaggc 550
 tggagtgcag tggtgccatc tcagcttact gcaacctctg cctgccaggt 600
 tcaagcgatt ctcatgcctc cacctcccaa gtagctggga ctacaggcat 650
 gcaccacaat gcccaactaa tttttgtatt tttagtagag acggggtttt 700
 gccatgttgc ccaggctggc cttgaactcc tggcctcaaa caatccactt 750
 gcctcggcct cccaaagtgt tatgattaca ggcgtgagcc accgtgcctg 800
 gcctaaacat ttatcttttc tttgtgttgg gaactttgaa attatacaat 850
 gaattattgt taactgtcat ctccctgctg tgctatggaa cactgggact 900
 tcttcctct atctaactgt atatttgtac cagttaacca accgtacttc 950
 atccccactc ctctctatcc ttcccaacct ctgatcacct cattctactc 1000
 tctacctcca tgagatccac ttttttagct cccacatgtg agtaagaaaa 1050
 tgcaatattt gtctttctgt gcctggctta tttcacttaa cataatgact 1100
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 aattaaaata accacacatg gcaaaaaa 1177

<210> 382
 <211> 111
 <212> PRT
 <213> Homo Sapien

<400> 382
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 Ala Tyr Thr Ile Met Ser Leu Pro Pro Ser Phe Asp Cys Gly Pro
 20 25 30
 Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg
 35 40 45
 Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val

	50		55		60
Ser Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro					
	65		70		75
Met Pro Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser					
	80		85		90
Phe Cys Val Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val					
	95		100		105
Ala Val Glu Cys Leu Lys					
	110				

<210> 383
 <211> 2061
 <212> DNA
 <213> Homo Sapien

<400> 383
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 gttccttcaa gtagcacctc tatcagttat ggctaaatcc tgtccatctg 150
 tgtgtcgctg cgatgcgggt ttcatttact gtaatgatcg ctttctgaca 200
 tccattccaa caggaatacc agaggatgct acaactctct accttcagaa 250
 caaccaaata aataatgctg ggattccttc agatttgaaa aacttgctga 300
 aagtagaaaag aatataccta taccacaaca gtttagatga atttcctacc 350
 aacctcccaa agtatgtaaa agagttacat ttgcaagaaa ataacataag 400
 gactatcact tatgattcac tttcaaaaat tccctatctg gaagaattac 450
 atttagatga caactctgtc tctgcagtta gcatagaaga gggagcattc 500
 cgagacagca actatctccg actgcttttc ctgtcccgtat atcaccttag 550
 cacaattccc tgggggttgc ccaggactat agaagaacta cgcttggtatg 600
 ataatcgcat atccactatt tcatcaccat ctcttcaagg tctcactagt 650
 ctaaaacgcc tgggttctaga tggaaacctg ttgaacaatc atgggttagg 700
 tgacaaagtt ttcttcaacc tagttaattt gacagagctg tccctgggtgc 750
 ggaattccct gactgctgca ccagtaaacc ttccaggcac aaacctgagg 800
 aagctttatc ttcaagataa ccacatcaat cgggtgcccc caaatgcttt 850
 ttcttatcta aggcagctct atcgactgga tatgtccaat aataacctaa 900
 gtaatttacc tcagggtatc tttgatgatt tggacaatat aacacaactg 950

attcttcgca acaatccctg gtattgctgg tgcaagatga aatgggtacg 1000
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 gccaaagcccc agaaaagggt cgtgggatgg ctattaagga tctcaatgca 1100
 gaactgtttg attgtaagga cagtgggatt gtaagcacca ttcagataac 1150
 cactgcaata cccaacacag tgtatcctgc ccaaggacag tggccagctc 1200
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 caaaccacag ggagtccctc aagaaaaaca attacaatta ctgtgaagtc 1300
 tgtcacctct gataccattc atatctcttg gaaacttgct ctacctatga 1350
 ctgctttgag actcagctgg cttaaactgg gccatagccc ggcatttgga 1400
 tctataacag aaacaattgt aacaggggaa cgcagtgagt acttggtcac 1450
 agccctggag cctgattcac cctataaagt atgcatgggt cccatggaaa 1500
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 gaagctacag agacagtggg attccagact cagatcactc aactcatga 2000
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 gaggtgatgg t 2061

<210> 384

<211> 649

<212> PRT

<213> Homo Sapien

<400> 384

Met	Ile	Ser	Ala	Ala	Trp	Ser	Ile	Phe	Leu	Ile	Gly	Thr	Lys	Ile
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Gly	Leu	Phe	Leu	Gln	Val	Ala	Pro	Leu	Ser	Val	Met	Ala	Lys	Ser
			20					25					30	

	320		325		330
Gly Leu Met Cys	Gln Ala Pro Glu Lys	Val Arg Gly Met Ala	Ile		
	335		340		345
Lys Asp Leu Asn	Ala Glu Leu Phe Asp	Cys Lys Asp Ser Gly	Ile		
	350		355		360
Val Ser Thr Ile	Gln Ile Thr Thr Ala	Ile Pro Asn Thr Val	Tyr		
	365		370		375
Pro Ala Gln Gly	Gln Trp Pro Ala Pro	Val Thr Lys Gln Pro	Asp		
	380		385		390
Ile Lys Asn Pro	Lys Leu Thr Lys Asp	Gln Gln Thr Thr Gly	Ser		
	395		400		405
Pro Ser Arg Lys	Thr Ile Thr Ile Thr	Val Lys Ser Val Thr	Ser		
	410		415		420
Asp Thr Ile His	Ile Ser Trp Lys Leu	Ala Leu Pro Met Thr	Ala		
	425		430		435
Leu Arg Leu Ser	Trp Leu Lys Leu Gly	His Ser Pro Ala Phe	Gly		
	440		445		450
Ser Ile Thr Glu	Thr Ile Val Thr Gly	Glu Arg Ser Glu Tyr	Leu		
	455		460		465
Val Thr Ala Leu	Glu Pro Asp Ser Pro	Tyr Lys Val Cys Met	Val		
	470		475		480
Pro Met Glu Thr	Ser Asn Leu Tyr Leu	Phe Asp Glu Thr Pro	Val		
	485		490		495
Cys Ile Glu Thr	Glu Thr Ala Pro Leu	Arg Met Tyr Asn Pro	Thr		
	500		505		510
Thr Thr Leu Asn	Arg Glu Gln Glu Lys	Glu Pro Tyr Lys Asn	Pro		
	515		520		525
Asn Leu Pro Leu	Ala Ala Ile Ile Gly	Gly Ala Val Ala Leu	Val		
	530		535		540
Thr Ile Ala Leu	Leu Ala Leu Val Cys	Trp Tyr Val His Arg	Asn		
	545		550		555
Gly Ser Leu Phe	Ser Arg Asn Cys Ala	Tyr Ser Lys Gly Arg	Arg		
	560		565		570
Arg Lys Asp Asp	Tyr Ala Glu Ala Gly	Thr Lys Lys Asp Asn	Ser		
	575		580		585
Ile Leu Glu Ile	Arg Glu Thr Ser Phe	Gln Met Leu Pro Ile	Ser		
	590		595		600
Asn Glu Pro Ile	Ser Lys Glu Glu Phe	Val Ile His Thr Ile	Phe		
	605		610		615

Pro Pro Asn Gly Met Asn Leu Tyr Lys Asn Asn His Ser Glu Ser
620 625 630

Ser Ser Asn Arg Ser Tyr Arg Asp Ser Gly Ile Pro Asp Ser Asp
635 640 645

His Ser His Ser

<210> 385

<211> 1882

<212> DNA

<213> Homo Sapien

<400> 385

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ggccagagct cagggtgctg agcgtgtgac cagcagttag cagaggccgg 200
ccatggccag cctggggctg ctgctcctgc tcttactgac agcactgcca 250
ccgctgtggt cctcctcact gcctgggctg gacactgctg aaagtaaagc 300
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cctgctgcag ccgctgagcc tgcgcgtggg gatgctgggg gagaagctgg 500
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aggatgcttc ggggagcctg atgctgaaga tgaagaatta tctaaagcta 1100

Leu	Glu	Glu	Gln	Leu	Lys	Ser	Val	Arg	Glu	Lys	Trp	Ala	Gln	Glu	110	115	120
Pro	Leu	Leu	Gln	Pro	Leu	Ser	Leu	Arg	Val	Gly	Met	Leu	Gly	Glu	125	130	135
Lys	Leu	Glu	Ala	Ala	Ile	Gln	Arg	Ser	Leu	His	Tyr	Leu	Lys	Leu	140	145	150
Ser	Asp	Pro	Lys	Tyr	Leu	Arg	Glu	Phe	Gln	Leu	Thr	Leu	Gln	Pro	155	160	165
Gly	Phe	Trp	Lys	Leu	Pro	His	Ala	Trp	Ile	His	Thr	Asp	Ala	Ser	170	175	180
Leu	Val	Tyr	Pro	Thr	Phe	Gly	Pro	Gln	Asp	Ser	Phe	Ser	Glu	Glu	185	190	195
Arg	Ser	Asp	Val	Cys	Leu	Val	Gln	Leu	Leu	Gly	Thr	Gly	Thr	Asp	200	205	210
Ser	Ser	Glu	Pro	Cys	Gly	Leu	Ser	Asp	Leu	Cys	Arg	Ser	Leu	Met	215	220	225
Thr	Lys	Pro	Gly	Cys	Ser	Gly	Tyr	Cys	Leu	Ser	His	Gln	Leu	Leu	230	235	240
Phe	Phe	Leu	Trp	Ala	Arg	Met	Arg	Gly	Cys	Thr	Gln	Gly	Pro	Leu	245	250	255
Gln	Gln	Ser	Gln	Asp	Tyr	Ile	Asn	Leu	Phe	Cys	Ala	Asn	Met	Met	260	265	270
Asp	Leu	Asn	Arg	Arg	Ala	Glu	Ala	Ile	Gly	Tyr	Ala	Tyr	Pro	Thr	275	280	285
Arg	Asp	Ile	Phe	Met	Glu	Asn	Ile	Met	Phe	Cys	Gly	Met	Gly	Gly	290	295	300
Phe	Ser	Asp	Phe	Tyr	Lys	Leu	Arg	Trp	Leu	Glu	Ala	Ile	Leu	Ser	305	310	315
Trp	Gln	Lys	Gln	Gln	Glu	Gly	Cys	Phe	Gly	Glu	Pro	Asp	Ala	Glu	320	325	330
Asp	Glu	Glu	Leu	Ser	Lys	Ala	Ile	Gln	Tyr	Gln	Gln	His	Phe	Ser	335	340	345
Arg	Arg	Val	Lys	Arg	Arg	Glu	Lys	Gln	Phe	Pro	Asp	Ser	Arg	Ser	350	355	360
Val	Ala	Gln	Ala	Gly	Val	Gln	Trp	Arg	Asn	Leu	Gly	Ser	Leu	Gln	365	370	375
Pro	Leu	Pro	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ile	Leu	Pro	380	385	390
Ser	Ser	Trp	Asp	Tyr	Arg	Ser	Val	Pro	Pro	Tyr	Leu	Ala	Asn	Phe			

	395		400		405
Tyr Ile Phe Leu Val Glu Thr Gly Phe His His Val Ala His Ala					
	410		415		420
Gly Leu Glu Leu Leu Ile Ser Arg Asp Pro Pro Thr Ser Gly Ser					
	425		430		435
Gln Ser Val Gly Leu					
	440				

<210> 387
 <211> 1094
 <212> DNA
 <213> Homo Sapien

<400> 387
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 gcccggggct gctgctgagg gatcgggagg gagggggggc ggcattaggag 150
 atcgcttcaa gattgagggg cgtgcagttg ttccaggggt gaagcctcag 200
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 gtggatatca cttcgaaaagg aaaaatgaga gcaagatatg tgaattacat 400
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 tgtgcttctg cctaaagtgg tcaacacaag tgatcctgac atgagacggg 600
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 tagcagcggc agcagtaaaa caggcaaaaag tggggctggc aaaaggaggt 750
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 ttttgtactt ggtacacgag aaaaccacgc tttcatcttt tgtctgtatg 950
 aggtcaatat tgatgtcact gaattaatta cagtgtccta tagaaaatgc 1000
 cattaataaa ttatatgaac tactatacat tatgtatatt aattaaaaca 1050

tcttaatcca gaaatcaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1094

<210> 388

<211> 242

<212> PRT

<213> Homo Sapien

<400> 388

Met Ala Ala Ala Leu Trp Gly Phe Phe Pro Val Leu Leu Leu Leu
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Leu Leu Ser Gly Asp Val Gln Ser Ser Glu Val Pro Gly Ala Ala
20 25 30

Ala Glu Gly Ser Gly Gly Ser Gly Val Gly Ile Gly Asp Arg Phe
35 40 45

Lys Ile Glu Gly Arg Ala Val Val Pro Gly Val Lys Pro Gln Asp
50 55 60

Trp Ile Ser Ala Ala Arg Val Leu Val Asp Gly Glu Glu His Val
65 70 75

Gly Phe Leu Lys Thr Asp Gly Ser Phe Val Val His Asp Ile Pro
80 85 90

Ser Gly Ser Tyr Val Val Glu Val Val Ser Pro Ala Tyr Arg Phe
95 100 105

Asp Pro Val Arg Val Asp Ile Thr Ser Lys Gly Lys Met Arg Ala
110 115 120

Arg Tyr Val Asn Tyr Ile Lys Thr Ser Glu Val Val Arg Leu Pro
125 130 135

Tyr Pro Leu Gln Met Lys Ser Ser Gly Pro Pro Ser Tyr Phe Ile
140 145 150

Lys Arg Glu Ser Trp Gly Trp Thr Asp Phe Leu Met Asn Pro Met
155 160 165

Val Met Met Met Val Leu Pro Leu Leu Ile Phe Val Leu Leu Pro
170 175 180

Lys Val Val Asn Thr Ser Asp Pro Asp Met Arg Arg Glu Met Glu
185 190 195

Gln Ser Met Asn Met Leu Asn Ser Asn His Glu Leu Pro Asp Val
200 205 210

Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly Lys
215 220 225

Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys
230 235 240

Arg Arg

<210> 389
 <211> 1875
 <212> DNA
 <213> Homo Sapien

<400> 389
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 ggagccttgg gagctggctg ggtggctgcc tgctggtgtc agcattggga 100
 atggtaccac ctcccgaaaa tgtcagaatg aattctgtta atttcaagaa 150
 cattctacag tgggagtcac ctgcttttgc caaagggaac ctgactttca 200
 cagctcagta cctaagttat aggatattcc aagataaatg catgaatact 250
 accttgacgg aatgtgattt ctcaagtctt tccaagtatg gtgaccacac 300
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 tcaccttctg tctgtggat gacaccatta ttggaccccc tggaatgcaa 400
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 tgagaatgaa tacgaaactt ggactatgaa gaatgtgtat aactcatgga 500
 cttataatgt gcaatactgg aaaaacggta ctgatgaaaa gtttcaaatt 550
 actccccagt atgactttga ggtcctcaga aacctggagc catggacaac 600
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 aatggagtga gcctgtctgt gagcaaaca cccatgacga aacgggtcccc 700
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 caaacaaggg ccaagaccat ctgagccagc cccacatcta gaactccaga 1150
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 acttaaaatg aggaataaga atggagatgt tacatctggt agatgtaaca 1700
 ttctaccaga ttatggatgg actgatctga aaatcgacct caactcaagg 1750
 gtggtcagct caatgctaca cagagcacgg acttttggat tctttgcagt 1800
 actttgaatt tatttttcta cctatatatg ttttatatgc tgctggtgct 1850
 ccattaaagt tttactctgt gttgc 1875

<210> 390
 <211> 325
 <212> PRT
 <213> Homo Sapien

<400> 390
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 Ser Ala Leu Gly Met Val Pro Pro Pro Glu Asn Val Arg Met Asn
 20 25 30
 Ser Val Asn Phe Lys Asn Ile Leu Gln Trp Glu Ser Pro Ala Phe
 35 40 45
 Ala Lys Gly Asn Leu Thr Phe Thr Ala Gln Tyr Leu Ser Tyr Arg
 50 55 60
 Ile Phe Gln Asp Lys Cys Met Asn Thr Thr Leu Thr Glu Cys Asp
 65 70 75
 Phe Ser Ser Leu Ser Lys Tyr Gly Asp His Thr Leu Arg Val Arg
 80 85 90
 Ala Glu Phe Ala Asp Glu His Ser Asp Trp Val Asn Ile Thr Phe
 95 100 105
 Cys Pro Val Asp Asp Thr Ile Ile Gly Pro Pro Gly Met Gln Val
 110 115 120
 Glu Val Leu Ala Asp Ser Leu His Met Arg Phe Leu Ala Pro Lys
 125 130 135
 Ile Glu Asn Glu Tyr Glu Thr Trp Thr Met Lys Asn Val Tyr Asn

	140		145		150
Ser Trp Thr Tyr	Asn Val Gln Tyr Trp	Lys Asn Gly Thr Asp	Glu		
	155		160		165
Lys Phe Gln Ile	Thr Pro Gln Tyr Asp	Phe Glu Val Leu Arg	Asn		
	170		175		180
Leu Glu Pro Trp	Thr Thr Tyr Cys Val	Gln Val Arg Gly Phe	Leu		
	185		190		195
Pro Asp Arg Asn	Lys Ala Gly Glu Trp	Ser Glu Pro Val Cys	Glu		
	200		205		210
Gln Thr Thr His	Asp Glu Thr Val Pro	Ser Trp Met Val Ala	Val		
	215		220		225
Ile Leu Met Ala	Ser Val Phe Met Val	Cys Leu Ala Leu Leu	Gly		
	230		235		240
Cys Phe Ser Leu	Leu Trp Cys Val Tyr	Lys Lys Thr Lys Tyr	Ala		
	245		250		255
Phe Ser Pro Arg	Asn Ser Leu Pro Gln	His Leu Lys Glu Phe	Leu		
	260		265		270
Gly His Pro His	His Asn Thr Leu Leu	Phe Phe Ser Phe Pro	Leu		
	275		280		285
Ser Asp Glu Asn	Asp Val Phe Asp Lys	Leu Ser Val Ile Ala	Glu		
	290		295		300
Asp Ser Glu Ser	Gly Lys Gln Asn Pro	Gly Asp Ser Cys Ser	Leu		
	305		310		315
Gly Thr Pro Pro	Gly Gln Gly Pro Gln	Ser			
	320		325		

<210> 391

<211> 1157

<212> DNA

<213> Homo Sapien

<400> 391

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gaatcaagtg gaaccggaag gccctgcccc gcaactgcccc gatcactgag 200

gccaggtgg ctgagaaccg cccgggagcc ttcatacaagc aaggccgcaa 250

gctcgacatt gacttcggag ccgagggcaa caggtactac gaggccaact 300

actggcagtt ccccgatggc atccactaca acggctgctc tgaggctaata 350

gtgaccaagg aggcatttgt caccggctgc atcaatgcca cccaggcggc 400
gaaccagggg gagttccaga agccagacaa caagctccac cagcaggtgc 450
tctggcggct ggtccaggag ctctgctccc tcaagcattg cgagttttgg 500
ttggagaggg ggcgaggact tcgggtcacc atgcaccagc cagtgtcct 550
ctgccttctg gctttgatct ggctcatggt gaaataagct tgccaggagg 600
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cttctcccc aaaccacgc gtgttctgaa ggtgccagg agcggcgatg 700
cactcgcact gcaaatgccg ctcccacgta tgcgccctgg tatgtgctg 750
cgttctgata gatgggggac tgtggcttct ccgtcactcc attctcagcc 800
cctagcagag cgtctggcac actagattag tagtaaatgc ttgatgagaa 850
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ttagaggtag gtgtattccc gttttacaga taaggaaact gagggccaga 950
gagctgaagt actgcacca gcatcaccag ctagaaagtg gcagagccag 1000
gattcaacct tggcttgtct aaccccaggt tttctgtct gtccaattcc 1050
agagctgtct ggtgatcact ttatgtctca cagggacca catccaaaca 1100
tgtatctcta atgaaattgt gaaagctcca tgtttagaaa taaatgaaaa 1150
cacctga 1157

<210> 392
<211> 176
<212> PRT
<213> Homo Sapien

<400> 392
Met Arg Lys His Leu Ser Trp Trp Trp Leu Ala Thr Val Cys Met
1 5 10 15
Leu Leu Phe Ser His Leu Ser Ala Val Gln Thr Arg Gly Ile Lys
20 25 30
His Arg Ile Lys Trp Asn Arg Lys Ala Leu Pro Ser Thr Ala Gln
35 40 45
Ile Thr Glu Ala Gln Val Ala Glu Asn Arg Pro Gly Ala Phe Ile
50 55 60
Lys Gln Gly Arg Lys Leu Asp Ile Asp Phe Gly Ala Glu Gly Asn
65 70 75
Arg Tyr Tyr Glu Ala Asn Tyr Trp Gln Phe Pro Asp Gly Ile His
80 85 90

Tyr	Asn	Gly	Cys	Ser	Glu	Ala	Asn	Val	Thr	Lys	Glu	Ala	Phe	Val	95	100	105
Thr	Gly	Cys	Ile	Asn	Ala	Thr	Gln	Ala	Ala	Asn	Gln	Gly	Glu	Phe	110	115	120
Gln	Lys	Pro	Asp	Asn	Lys	Leu	His	Gln	Gln	Val	Leu	Trp	Arg	Leu	125	130	135
Val	Gln	Glu	Leu	Cys	Ser	Leu	Lys	His	Cys	Glu	Phe	Trp	Leu	Glu	140	145	150
Arg	Gly	Ala	Gly	Leu	Arg	Val	Thr	Met	His	Gln	Pro	Val	Leu	Leu	155	160	165
Cys	Leu	Leu	Ala	Leu	Ile	Trp	Leu	Met	Val	Lys					170	175	

<210> 393

<211> 1705

<212> DNA

<213> Homo Sapien

<400> 393

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ccagctgcct ccaggcagcc agccctcaag catcacttac aggaccagag 150
ggacaagaca tgactgtgat gaggagctgc tttcgccaat ttaacaccaa 200
gaagaattga ggctgcttgg gaggaaggcc aggaggaaca cgagactgag 250
agatgaattt tcaacagagg ctgcaaagcc tgtggacttt agccagaccc 300
ttctgccctc ctttgctggc gacagcctct caaatgcaga tggttgtgct 350
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cagaaaactgt gggaaagcctt ctgggctgtg aaagacacta tgcaagctca 500
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tctcggatgc tgagagctgt taccttgtcc acaccctgct ggagttctac 600
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tctgaagtca ttctctactc tggccaacaa ctttggttctc atcgtgtcac 700
aactgcaacc cagtcaagaa aatgagatgt tttccatcag agacagtgca 750
cacaggcggg ttctgctatt ccggagagca ttcaaacagt tggacgtaga 800
agcagctctg accaaagccc ttggggaagt ggacattctt ctgacctgga 850

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tgcagaaatt ctacaagctc tgaatgtcta gaccaggacc tccctcccc 900
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 tgttcactgg acacttcacg cccttggcca tgggtcccat tcttggccca 1000
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 aaaaa 1705

<210> 394
 <211> 206
 <212> PRT
 <213> Homo Sapien

<400> 394
 Met Asn Phe Gln Gln Arg Leu Gln Ser Leu Trp Thr Leu Ala Arg
 1 5 10 15
 Pro Phe Cys Pro Pro Leu Leu Ala Thr Ala Ser Gln Met Gln Met
 20 25 30
 Val Val Leu Pro Cys Leu Gly Phe Thr Leu Leu Leu Trp Ser Gln
 35 40 45
 Val Ser Gly Ala Gln Gly Gln Glu Phe His Phe Gly Pro Cys Gln
 50 55 60
 Val Lys Gly Val Val Pro Gln Lys Leu Trp Glu Ala Phe Trp Ala
 65 70 75
 Val Lys Asp Thr Met Gln Ala Gln Asp Asn Ile Thr Ser Ala Arg

Cys Lys Leu Glu Ile Phe His Phe Ala Cys Gln Trp Gly Arg Ser
35 40 45
Leu Ser Leu Ser Phe Tyr Phe Leu Lys Phe Gln Leu Ser Asp Ser
50 55 60
Gly Gly Thr Cys Glu Gly Leu Phe Tyr Glu Tyr Ile Ala
65 70

<210> 397

<211> 1750

<212> DNA

<213> Homo Sapien

<400> 397

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ttcttatcca tcaacatgaa gaatgtccta caatggactc caccagaggg 150
tcttcaagga gttaaagtta cttacactgt gcagtatttc atatatgggc 200
aaaagaaatg gctgaataaa tcagaatgca gaaatatcaa tagaacctac 250
tgtgatcttt ctgctgaaac ttctgactac gaacaccagt attatgccaa 300
agttaaggcc atttggggaa caaagtgttc caaatgggct gaaagtggac 350
ggttctatcc ttttttagaa acacaaattg gccaccaga ggtggcactg 400
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aaggtacttc tctcaccag caagagtccc tcagcagaac aatacccccg 1150
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<210> 398

<211> 542

<212> PRT

<213> Homo Sapien

<400> 398

Met	Pro	Leu	Pro	Pro	Leu	Leu	Leu	Leu	Leu	Leu	Ala	Ala	Pro	Trp
1				5					10					15
Gly	Arg	Ala	Val	Pro	Cys	Val	Ser	Gly	Gly	Leu	Pro	Lys	Pro	Ala
				20					25					30
Asn	Ile	Thr	Phe	Leu	Ser	Ile	Asn	Met	Lys	Asn	Val	Leu	Gln	Trp
				35					40					45
Thr	Pro	Pro	Glu	Gly	Leu	Gln	Gly	Val	Lys	Val	Thr	Tyr	Thr	Val
				50					55					60
Gln	Tyr	Phe	Ile	Tyr	Gly	Gln	Lys	Lys	Trp	Leu	Asn	Lys	Ser	Glu
				65					70					75
Cys	Arg	Asn	Ile	Asn	Arg	Thr	Tyr	Cys	Asp	Leu	Ser	Ala	Glu	Thr
				80					85					90
Ser	Asp	Tyr	Glu	His	Gln	Tyr	Tyr	Ala	Lys	Val	Lys	Ala	Ile	Trp
				95					100					105
Gly	Thr	Lys	Cys	Ser	Lys	Trp	Ala	Glu	Ser	Gly	Arg	Phe	Tyr	Pro
				110					115					120
Phe	Leu	Glu	Thr	Gln	Ile	Gly	Pro	Pro	Glu	Val	Ala	Leu	Thr	Thr
				125					130					135

425	430	435
Gln Tyr Ser Tyr Thr Pro Gln Leu Gln Asp Leu Asp Pro Leu Ala		
440	445	450
Gln Glu His Thr Asp Ser Glu Glu Gly Pro Glu Glu Glu Pro Ser		
455	460	465
Thr Thr Leu Val Asp Trp Asp Pro Gln Thr Gly Arg Leu Cys Ile		
470	475	480
Pro Ser Leu Ser Ser Phe Asp Gln Asp Ser Glu Gly Cys Glu Pro		
485	490	495
Ser Glu Gly Asp Gly Leu Gly Glu Glu Gly Leu Leu Ser Arg Leu		
500	505	510
Tyr Glu Glu Pro Ala Pro Asp Arg Pro Pro Gly Glu Asn Glu Thr		
515	520	525
Tyr Leu Met Gln Phe Met Glu Glu Trp Gly Leu Tyr Val Gln Met		
530	535	540

Glu Asn

<210> 399
 <211> 1515
 <212> DNA
 <213> Homo Sapien

<400> 399
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 cagagtggat gctacaacat gatctaattcc ccggagactt gagggacctc 150
 cgagtagaac ctgttacaac tagtggtgca acaggggact attcaatttt 200
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 cgaacatcac tgcttgtaag aagaatgagg agacagtaga agtgaacttc 600
 acaaccactc ccctgggaaa cagatacatg gctcttatcc aacacagcac 650

80										85					90				
Lys	Ser	Asn	Phe	Gln	Ser	Tyr	Ser	Cys	Val	Arg	Cys	Asn	Tyr	Thr					
				95					100					105					
Glu	Ala	Phe	Gln	Thr	Gln	Thr	Arg	Pro	Ser	Gly	Gly	Lys	Trp	Thr					
				110					115					120					
Phe	Ser	Tyr	Ile	Gly	Phe	Pro	Val	Glu	Leu	Asn	Thr	Val	Tyr	Phe					
				125					130					135					
Ile	Gly	Ala	His	Asn	Ile	Pro	Asn	Ala	Asn	Met	Asn	Glu	Asp	Gly					
				140					145					150					
Pro	Ser	Met	Ser	Val	Asn	Phe	Thr	Ser	Pro	Gly	Cys	Leu	Asp	His					
				155					160					165					
Ile	Met	Lys	Tyr	Lys	Lys	Lys	Cys	Val	Lys	Ala	Gly	Ser	Leu	Trp					
				170					175					180					
Asp	Pro	Asn	Ile	Thr	Ala	Cys	Lys	Lys	Asn	Glu	Glu	Thr	Val	Glu					
				185					190					195					
Val	Asn	Phe	Thr	Thr	Thr	Pro	Leu	Gly	Asn	Arg	Tyr	Met	Ala	Leu					
				200					205					210					
Ile	Gln	His	Ser	Thr	Ile	Ile	Gly	Phe	Ser	Gln	Val	Phe	Glu	Pro					
				215					220					225					
His	Gln	Lys	Lys	Gln	Thr	Arg	Ala	Ser	Val	Val	Ile	Pro	Val	Thr					
				230					235					240					
Gly	Asp	Ser	Glu	Gly	Ala	Thr	Val	Gln	Leu	Thr	Pro	Tyr	Phe	Pro					
				245					250					255					
Thr	Cys	Gly	Ser	Asp	Cys	Ile	Arg	His	Lys	Gly	Thr	Val	Val	Leu					
				260					265					270					
Cys	Pro	Gln	Thr	Gly	Val	Pro	Phe	Pro	Leu	Asp	Asn	Asn	Lys	Ser					
				275					280					285					
Lys	Pro	Gly	Gly	Trp	Leu	Pro	Leu	Leu	Leu	Leu	Ser	Leu	Leu	Val					
				290					295					300					
Ala	Thr	Trp	Val	Leu	Val	Ala	Gly	Ile	Tyr	Leu	Met	Trp	Arg	His					
				305					310					315					
Glu	Arg	Ile	Lys	Lys	Thr	Ser	Phe	Ser	Thr	Thr	Thr	Leu	Leu	Pro					
				320					325					330					
Pro	Ile	Lys	Val	Leu	Val	Val	Tyr	Pro	Ser	Glu	Ile	Cys	Phe	His					
				335					340					345					
His	Thr	Ile	Cys	Tyr	Phe	Thr	Glu	Phe	Leu	Gln	Asn	His	Cys	Arg					
				350					355					360					
Ser	Glu	Val	Ile	Leu	Glu	Lys	Trp	Gln	Lys	Lys	Lys	Ile	Ala	Glu					
				365					370					375					

Met	Gly	Pro	Val	Gln	Trp	Leu	Ala	Thr	Gln	Lys	Lys	Ala	Ala	Asp
				380					385					390
Lys	Val	Val	Phe	Leu	Leu	Ser	Asn	Asp	Val	Asn	Ser	Val	Cys	Asp
				395					400					405
Gly	Thr	Cys	Gly	Lys	Ser	Glu	Gly	Ser	Pro	Ser	Glu	Asn	Ser	Gln
				410					415					420
Asp	Leu	Phe	Pro	Leu	Ala	Phe	Asn	Leu	Phe	Cys	Ser	Asp	Leu	Arg
				425					430					435
Ser	Gln	Ile	His	Leu	His	Lys	Tyr	Val	Val	Val	Tyr	Phe	Arg	Glu
				440					445					450
Ile	Asp	Thr	Lys	Asp	Asp	Tyr	Asn	Ala	Leu	Ser	Val	Cys	Pro	Lys
				455					460					465
Tyr	His	Leu	Met	Lys	Asp	Ala	Thr	Ala	Phe	Cys	Ala	Glu	Leu	Leu
				470					475					480
His	Val	Lys	Gln	Gln	Val	Ser	Ala	Gly	Lys	Arg	Ser	Gln	Ala	Cys
				485					490					495
His	Asp	Gly	Cys	Cys	Ser	Leu								
				500										

<210> 401
 <211> 2275
 <212> DNA
 <213> Homo Sapien

<400> 401
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 cgttgcaggg cagaaaagag aagagagttg acaacatcga gatacagaaa 250
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 ctaaagtgtca tcacaaaaga gtaaaaaaat ttacaaaat taaaaatggt 2200
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<210> 402
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 <212> PRT
 <213> Homo Sapien

<400> 402
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 Phe Arg Ser Leu Leu Gly Ser Ala Ala Glu Pro Ala Arg Gly Pro
 35 40 45
 Pro Pro Gln His Pro Leu Gln Gly Arg Lys Glu Lys Arg Val Asp
 50 55 60
 Asn Ile Glu Ile Gln Lys Phe Ile Ser Lys Lys Ala Asp Leu Leu
 65 70 75
 Phe Ala Leu Ser Trp Lys Ser Asp Ala Pro Ala Thr Ser Glu Ile
 80 85 90
 Asn Glu Asp Ser Glu Asp His Tyr Ala Ile Met Pro Pro Leu Glu
 95 100 105
 Gln Phe Met Glu Ile Pro Ser Met Asp Arg Arg Glu Leu Phe Phe
 110 115 120
 Arg Asp Ile Glu Arg Gly Asp Ile Val Ile Gly Arg Ile Ser Ser
 125 130 135
 Ile Arg Glu Phe Gly Phe Phe Met Val Leu Ile Cys Leu Gly Ser
 140 145 150
 Gly Ile Met Arg Asp Ile Ala His Leu Glu Ile Thr Ala Leu Cys
 155 160 165
 Pro Leu Arg Asp Val Pro Ser His Ser Asn His Gly Asp Pro Leu
 170 175 180
 Ser Tyr Tyr Gln Thr Gly Asp Ile Ile Arg Ala Gly Ile Lys Asp
 185 190 195
 Ile Asp Arg Tyr His Glu Lys Leu Ala Val Ser Leu Tyr Ser Ser
 200 205 210
 Ser Leu Pro Pro His Leu Ser Gly Ile Lys Leu Gly Val Ile Ser
 215 220 225

Ser	Glu	Glu	Leu	Pro	Leu	Tyr	Tyr	Arg	Arg	Ser	Val	Glu	Leu	Asn	
				230					235					240	
Ser	Asn	Ser	Leu	Glu	Ser	Tyr	Glu	Asn	Val	Met	Gln	Ser	Ser	Leu	
				245					250					255	
Gly	Phe	Val	Asn	Pro	Gly	Val	Val	Glu	Phe	Leu	Leu	Glu	Lys	Leu	
				260					265					270	
Gly	Ile	Asp	Glu	Ser	Asn	Pro	Pro	Ser	Leu	Met	Arg	Gly	Leu	Gln	
				275					280					285	
Ser	Lys	Asn	Phe	Ser	Glu	Asp	Asp	Phe	Ala	Ser	Ala	Leu	Arg	Lys	
				290					295					300	
Lys	Gln	Ser	Ala	Ser	Trp	Ala	Leu	Lys	Cys	Val	Lys	Ile	Gly	Val	
				305					310					315	
Asp	Tyr	Phe	Lys	Val	Gly	Arg	His	Val	Asp	Ala	Met	Asn	Glu	Tyr	
				320					325					330	
Asn	Lys	Ala	Leu	Glu	Ile	Asp	Lys	Gln	Asn	Val	Glu	Ala	Leu	Val	
				335					340					345	
Ala	Arg	Gly	Ala	Leu	Tyr	Ala	Thr	Lys	Gly	Ser	Leu	Asn	Lys	Ala	
				350					355					360	
Ile	Glu	Asp	Phe	Glu	Leu	Ala	Leu	Glu	Asn	Cys	Pro	Thr	His	Arg	
				365					370					375	
Asn	Ala	Arg	Lys	Tyr	Leu	Cys	Gln	Thr	Leu	Val	Glu	Arg	Gly	Gly	
				380					385					390	
Gln	Leu	Glu	Glu	Glu	Glu	Lys	Phe	Leu	Asn	Ala	Glu	Ser	Tyr	Tyr	
				395					400					405	
Lys	Lys	Ala	Leu	Ala	Leu	Asp	Glu	Thr	Phe	Lys	Asp	Ala	Glu	Asp	
				410					415					420	
Ala	Leu	Gln	Lys	Leu	His	Lys	Tyr	Met	Gln	Lys	Ser	Leu	Glu	Leu	
				425					430					435	
Arg	Glu	Lys	Gln	Ala	Glu	Lys	Glu	Glu	Lys	Gln	Lys	Thr	Lys	Lys	
				440					445					450	
Ile	Glu	Thr	Ser	Ala	Glu	Lys	Leu	Arg	Lys	Leu	Leu	Lys	Glu	Glu	
				455					460					465	
Lys	Arg	Leu	Lys	Lys	Lys	Arg	Arg	Lys	Ser	Thr	Ser	Ser	Ser	Ser	
				470					475					480	
Val	Ser	Ser	Ala	Asp	Glu	Ser	Val	Ser	Ser	Ser	Ser	Ser	Ser	Ser	
				485					490					495	
Ser	Ser	Gly	His	Lys	Arg	His	Lys	Lys	His	Lys	Arg	Asn	Arg	Ser	
				500					505					510	
Glu	Ser	Ser	Arg	Ser	Ser	Arg	Arg	His	Ser	Ser	Arg	Ala	Ser	Ser	

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<210> 404

<211> 347

<212> PRT

<213> Homo Sapien

<400> 404

Met	Asp	Leu	Ala	Ala	Asn	Glu	Ile	Ser	Ile	Tyr	Asp	Lys	Leu	Ser
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Glu	Thr	Val	Asp	Leu	Val	Arg	Gln	Thr	Gly	His	Gln	Cys	Gly	Met
				20					25				30	
Ser	Glu	Lys	Ala	Ile	Glu	Lys	Phe	Ile	Arg	Gln	Leu	Leu	Glu	Lys
				35					40				45	
Asn	Glu	Pro	Gln	Arg	Pro	Pro	Pro	Gln	Tyr	Pro	Leu	Leu	Ile	Val
				50					55				60	
Val	Tyr	Lys	Val	Leu	Ala	Thr	Leu	Gly	Leu	Ile	Leu	Leu	Thr	Ala
				65					70				75	
Tyr	Phe	Val	Ile	Gln	Pro	Phe	Ser	Pro	Leu	Ala	Pro	Glu	Pro	Val
				80					85				90	
Leu	Ser	Gly	Ala	His	Thr	Trp	Arg	Ser	Leu	Ile	His	His	Ile	Arg
				95					100				105	
Leu	Met	Ser	Leu	Pro	Ile	Ala	Lys	Lys	Tyr	Met	Ser	Glu	Asn	Lys
				110					115				120	

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 tgcaagaaca gattatgcag agaatgctaa caaattagaa gaaagtgcc 1150
 gagaacacca cataccttgt ccggaacatt acaatggctt ctgcatgcat 1200
 ggggaagtgt agcattctat caatatgcag gagccatctt gcaggtgtga 1250
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<210> 406

<211> 374

<212> PRT

<213> Homo Sapien

<400> 406

Met	Val	Leu	Trp	Glu	Ser	Pro	Arg	Gln	Cys	Ser	Ser	Trp	Thr	Leu	1	5	10	15
Cys	Glu	Gly	Phe	Cys	Trp	Leu	Leu	Leu	Leu	Pro	Val	Met	Leu	Leu	20	25	30	
Ile	Val	Ala	Arg	Pro	Val	Lys	Leu	Ala	Ala	Phe	Pro	Thr	Ser	Leu	35	40	45	
Ser	Asp	Cys	Gln	Thr	Pro	Thr	Gly	Trp	Asn	Cys	Ser	Gly	Tyr	Asp	50	55	60	
Asp	Arg	Glu	Asn	Asp	Leu	Phe	Leu	Cys	Asp	Thr	Asn	Thr	Cys	Lys	65	70	75	
Phe	Asp	Gly	Glu	Cys	Leu	Arg	Ile	Gly	Asp	Thr	Val	Thr	Cys	Val	80	85	90	
Cys	Gln	Phe	Lys	Cys	Asn	Asn	Asp	Tyr	Val	Pro	Val	Cys	Gly	Ser	95	100	105	
Asn	Gly	Glu	Ser	Tyr	Gln	Asn	Glu	Cys	Tyr	Leu	Arg	Gln	Ala	Ala	110	115	120	
Cys	Lys	Gln	Gln	Ser	Glu	Ile	Leu	Val	Val	Ser	Glu	Gly	Ser	Cys	125	130	135	
Ala	Thr	Asp	Ala	Gly	Ser	Gly	Ser	Gly	Asp	Gly	Val	His	Glu	Gly	140	145	150	
Ser	Gly	Glu	Thr	Ser	Gln	Lys	Glu	Thr	Ser	Thr	Cys	Asp	Ile	Cys	155	160	165	
Gln	Phe	Gly	Ala	Glu	Cys	Asp	Glu	Asp	Ala	Glu	Asp	Val	Trp	Cys	170	175	180	
Val	Cys	Asn	Ile	Asp	Cys	Ser	Gln	Thr	Asn	Phe	Asn	Pro	Leu	Cys	185	190	195	
Ala	Ser	Asp	Gly	Lys	Ser	Tyr	Asp	Asn	Ala	Cys	Gln	Ile	Lys	Glu	200	205	210	

Ala Ser Cys Gln Lys Gln Glu Lys Ile Glu Val Met Ser Leu Gly
215 220 225

Arg Cys Gln Asp Asn Thr Thr Thr Thr Thr Lys Ser Glu Asp Gly
230 235 240

His Tyr Ala Arg Thr Asp Tyr Ala Glu Asn Ala Asn Lys Leu Glu
245 250 255

Glu Ser Ala Arg Glu His His Ile Pro Cys Pro Glu His Tyr Asn
260 265 270

Gly Phe Cys Met His Gly Lys Cys Glu His Ser Ile Asn Met Gln
275 280 285

Glu Pro Ser Cys Arg Cys Asp Ala Gly Tyr Thr Gly Gln His Cys
290 295 300

Glu Lys Lys Asp Tyr Ser Val Leu Tyr Val Val Pro Gly Pro Val
305 310 315

Arg Phe Gln Tyr Val Leu Ile Ala Ala Val Ile Gly Thr Ile Gln
320 325 330

Ile Ala Val Ile Cys Val Val Val Leu Cys Ile Thr Arg Lys Cys
335 340 345

Pro Arg Ser Asn Arg Ile His Arg Gln Lys Gln Asn Thr Gly His
350 355 360

Tyr Ser Ser Asp Asn Thr Thr Arg Ala Ser Thr Arg Leu Ile
365 370

<210> 407
<211> 2609
<212> DNA
<213> Homo Sapien

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<210> 408

<211> 448

<212> PRT

<213> Homo Sapien

<400> 408

Met	Pro	Gly	Ile	Lys	Arg	Ile	Leu	Thr	Val	Thr	Ile	Leu	Ala	Leu	1	5	10	15
Cys	Leu	Pro	Ser	Pro	Gly	Asn	Ala	Gln	Ala	Gln	Cys	Thr	Asn	Gly	20	25	30	
Phe	Asp	Leu	Asp	Arg	Gln	Ser	Gly	Gln	Cys	Leu	Asp	Ile	Asp	Glu	35	40	45	
Cys	Arg	Thr	Ile	Pro	Glu	Ala	Cys	Arg	Gly	Asp	Met	Met	Cys	Val	50	55	60	
Asn	Gln	Asn	Gly	Gly	Tyr	Leu	Cys	Ile	Pro	Arg	Thr	Asn	Pro	Val	65	70	75	
Tyr	Arg	Gly	Pro	Tyr	Ser	Asn	Pro	Tyr	Ser	Thr	Pro	Tyr	Ser	Gly	80	85	90	
Pro	Tyr	Pro	Ala	Ala	Ala	Pro	Pro	Leu	Ser	Ala	Pro	Asn	Tyr	Pro	95	100	105	
Thr	Ile	Ser	Arg	Pro	Leu	Ile	Cys	Arg	Phe	Gly	Tyr	Gln	Met	Asp	110	115	120	

Glu	Ser	Asn	Gln	Cys	Val	Asp	Val	Asp	Glu	Cys	Ala	Thr	Asp	Ser	125	130	135
His	Gln	Cys	Asn	Pro	Thr	Gln	Ile	Cys	Ile	Asn	Thr	Glu	Gly	Gly	140	145	150
Tyr	Thr	Cys	Ser	Cys	Thr	Asp	Gly	Tyr	Trp	Leu	Leu	Glu	Gly	Gln	155	160	165
Cys	Leu	Asp	Ile	Asp	Glu	Cys	Arg	Tyr	Gly	Tyr	Cys	Gln	Gln	Leu	170	175	180
Cys	Ala	Asn	Val	Pro	Gly	Ser	Tyr	Ser	Cys	Thr	Cys	Asn	Pro	Gly	185	190	195
Phe	Thr	Leu	Asn	Glu	Asp	Gly	Arg	Ser	Cys	Gln	Asp	Val	Asn	Glu	200	205	210
Cys	Ala	Thr	Glu	Asn	Pro	Cys	Val	Gln	Thr	Cys	Val	Asn	Thr	Tyr	215	220	225
Gly	Ser	Leu	Ile	Cys	Arg	Cys	Asp	Pro	Gly	Tyr	Glu	Leu	Glu	Glu	230	235	240
Asp	Gly	Val	His	Cys	Ser	Asp	Met	Asp	Glu	Cys	Ser	Phe	Ser	Glu	245	250	255
Phe	Leu	Cys	Gln	His	Glu	Cys	Val	Asn	Gln	Pro	Gly	Thr	Tyr	Phe	260	265	270
Cys	Ser	Cys	Pro	Pro	Gly	Tyr	Ile	Leu	Leu	Asp	Asp	Asn	Arg	Ser	275	280	285
Cys	Gln	Asp	Ile	Asn	Glu	Cys	Glu	His	Arg	Asn	His	Thr	Cys	Asn	290	295	300
Leu	Gln	Gln	Thr	Cys	Tyr	Asn	Leu	Gln	Gly	Gly	Phe	Lys	Cys	Ile	305	310	315
Asp	Pro	Ile	Arg	Cys	Glu	Glu	Pro	Tyr	Leu	Arg	Ile	Ser	Asp	Asn	320	325	330
Arg	Cys	Met	Cys	Pro	Ala	Glu	Asn	Pro	Gly	Cys	Arg	Asp	Gln	Pro	335	340	345
Phe	Thr	Ile	Leu	Tyr	Arg	Asp	Met	Asp	Val	Val	Ser	Gly	Arg	Ser	350	355	360
Val	Pro	Ala	Asp	Ile	Phe	Gln	Met	Gln	Ala	Thr	Thr	Arg	Tyr	Pro	365	370	375
Gly	Ala	Tyr	Tyr	Ile	Phe	Gln	Ile	Lys	Ser	Gly	Asn	Glu	Gly	Arg	380	385	390
Glu	Phe	Tyr	Met	Arg	Gln	Thr	Gly	Pro	Ile	Ser	Ala	Thr	Leu	Val	395	400	405
Met	Thr	Arg	Pro	Ile	Lys	Gly	Pro	Arg	Glu	Ile	Gln	Leu	Asp	Leu			

410	415	420
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425	430	435
Val Ile Arg Leu Arg Ile Tyr Val Ser Gln Tyr Pro Phe		
440	445	

<210> 409
 <211> 2076
 <212> DNA
 <213> Homo Sapien

<400> 409
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<211> 476

<212> PRT

<213> Homo Sapien

<400> 410

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Thr	Pro	Tyr	Ile	Glu	Ala	Gly	Lys	Ile	Gln	Lys	Gly	Arg	Glu	Leu
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Ile	Asp	Asn	Pro	Val	Gly	Thr	Gly	Phe	Ser	Phe	Thr	Asp	Asp	Thr	
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	380		385		390
Val Ala Ala Ala Leu Thr Glu Arg Ser Leu Met Gly Met Asp Trp					
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Lys Gly Ser Gln Glu Tyr Lys Lys Ala Glu Lys Lys Val Trp Lys					
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Ile Phe Lys Ser Asp Ser Glu Val Ala Gly Tyr Ile Arg Gln Ala					
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Gly Asp Phe His Gln Val Ile Ile Arg Gly Gly Gly His Ile Leu					
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 <212> DNA
 <213> Homo Sapien

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<210> 412
 <211> 546
 <212> PRT
 <213> Homo Sapien

<400> 412

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Cys	Thr	Val	Asp	Ile	Glu	Ser	Leu	Thr	Gly	Tyr	Arg	Thr	Tyr	Arg	35	40	45	
Cys	Ala	His	Pro	Leu	Ala	Thr	Leu	Phe	Lys	Ile	Leu	Ala	Ser	Phe	50	55	60	
Tyr	Ile	Ser	Leu	Val	Ile	Phe	Tyr	Gly	Leu	Ile	Cys	Met	Tyr	Thr	65	70	75	
Leu	Trp	Trp	Met	Leu	Arg	Arg	Ser	Leu	Lys	Lys	Tyr	Ser	Phe	Glu	80	85	90	
Ser	Ile	Arg	Glu	Glu	Ser	Ser	Tyr	Ser	Asp	Ile	Pro	Asp	Val	Lys	95	100	105	
Asn	Asp	Phe	Ala	Phe	Met	Leu	His	Leu	Ile	Asp	Gln	Tyr	Asp	Pro	110	115	120	
Leu	Tyr	Ser	Lys	Arg	Phe	Ala	Val	Phe	Leu	Ser	Glu	Val	Ser	Glu	125	130	135	
Asn	Lys	Leu	Arg	Gln	Leu	Asn	Leu	Asn	Asn	Glu	Trp	Thr	Leu	Asp	140	145	150	
Lys	Leu	Arg	Gln	Arg	Leu	Thr	Lys	Asn	Ala	Gln	Asp	Lys	Leu	Glu	155	160	165	
Leu	His	Leu	Phe	Met	Leu	Ser	Gly	Ile	Pro	Asp	Thr	Val	Phe	Asp	170	175	180	
Leu	Val	Glu	Leu	Glu	Val	Leu	Lys	Leu	Glu	Leu	Ile	Pro	Asp	Val	185	190	195	
Thr	Ile	Pro	Pro	Ser	Ile	Ala	Gln	Leu	Thr	Gly	Leu	Lys	Glu	Leu	200	205	210	
Trp	Leu	Tyr	His	Thr	Ala	Ala	Lys	Ile	Glu	Ala	Pro	Ala	Leu	Ala	215	220	225	
Phe	Leu	Arg	Glu	Asn	Leu	Arg	Ala	Leu	His	Ile	Lys	Phe	Thr	Asp	230	235	240	
Ile	Lys	Glu	Ile	Pro	Leu	Trp	Ile	Tyr	Ser	Leu	Lys	Thr	Leu	Glu	245	250	255	
Glu	Leu	His	Leu	Thr	Gly	Asn	Leu	Ser	Ala	Glu	Asn	Asn	Arg	Tyr	260	265	270	
Ile	Val	Ile	Asp	Gly	Leu	Arg	Glu	Leu	Lys	Arg	Leu	Lys	Val	Leu	275	280	285	

Arg	Leu	Lys	Ser	Asn	Leu	Ser	Lys	Leu	Pro	Gln	Val	Val	Thr	Asp	
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Val	Gly	Val	His	Leu	Gln	Lys	Leu	Ser	Ile	Asn	Asn	Glu	Gly	Thr	
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Lys	Leu	Ile	Val	Leu	Asn	Ser	Leu	Lys	Lys	Met	Ala	Asn	Leu	Thr	
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Glu	Leu	Glu	Leu	Ile	Arg	Cys	Asp	Leu	Glu	Arg	Ile	Pro	His	Ser	
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Asn	Leu	Lys	Thr	Ile	Glu	Glu	Ile	Ile	Ser	Phe	Gln	His	Leu	His	
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Arg	Leu	Thr	Cys	Leu	Lys	Leu	Trp	Tyr	Asn	His	Ile	Ala	Tyr	Ile	
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Ile	Thr	Ala	Asn	Arg	Ile	Glu	Thr	Leu	Pro	Pro	Glu	Leu	Phe	Gln	
				455					460					465	
Cys	Arg	Lys	Leu	Arg	Ala	Leu	His	Leu	Gly	Asn	Asn	Val	Leu	Gln	
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Ser	Leu	Pro	Ser	Arg	Val	Gly	Glu	Leu	Thr	Asn	Leu	Thr	Gln	Ile	
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Glu	Leu	Arg	Gly	Asn	Arg	Leu	Glu	Cys	Leu	Pro	Val	Glu	Leu	Gly	
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Glu	Cys	Pro	Leu	Leu	Lys	Arg	Ser	Gly	Leu	Val	Val	Glu	Glu	Asp	
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Leu	Phe	Asn	Thr	Leu	Pro	Pro	Glu	Val	Lys	Glu	Arg	Leu	Trp	Arg	
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 <212> DNA
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<400> 413

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<211> 811

<212> PRT

<213> Homo Sapien

<400> 414

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				20					25					30
Met	Thr	Asn	Cys	Ser	Asn	Met	Ser	Leu	Arg	Lys	Val	Pro	Ala	Asp
				35					40					45
Leu	Thr	Pro	Ala	Thr	Thr	Thr	Leu	Asp	Leu	Ser	Tyr	Asn	Leu	Leu
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Phe	Gln	Leu	Gln	Ser	Ser	Asp	Phe	His	Ser	Val	Ser	Lys	Leu	Arg
				65					70					75
Val	Leu	Ile	Leu	Cys	His	Asn	Arg	Ile	Gln	Gln	Leu	Asp	Leu	Lys
				80					85					90
Thr	Phe	Glu	Phe	Asn	Lys	Glu	Leu	Arg	Tyr	Leu	Asp	Leu	Ser	Asn
				95					100					105
Asn	Arg	Leu	Lys	Ser	Val	Thr	Trp	Tyr	Leu	Leu	Ala	Gly	Leu	Arg
				110					115					120
Tyr	Leu	Asp	Leu	Ser	Phe	Asn	Asp	Phe	Asp	Thr	Met	Pro	Ile	Cys
				125					130					135
Glu	Glu	Ala	Gly	Asn	Met	Ser	His	Leu	Glu	Ile	Leu	Gly	Leu	Ser

	725		730		735
Tyr Cys Ile Pro Thr Arg Tyr His Lys	Leu Lys Ala Leu Leu Glu				
	740		745		750
Lys Lys Ala Tyr Leu Glu Trp Pro Lys Asp Arg Arg Lys Cys Gly					
	755		760		765
Leu Phe Trp Ala Asn Leu Arg Ala Ala Ile Asn Val Asn Val Leu					
	770		775		780
Ala Thr Arg Glu Met Tyr Glu Leu Gln Thr Phe Thr Glu Leu Asn					
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Leu					

<210> 415

<211> 3240

<212> DNA

<213> Homo Sapien

<400> 415

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Ile	Leu	Gly	Ser	Lys	Glu	Gln	Thr	Val	Thr	Ile	Arg	Phe	Gln	Lys	65	70	75
Leu	His	Leu	Ala	Cys	Gly	Ser	Glu	Arg	Leu	Thr	Leu	Arg	Ser	Pro	80	85	90
Leu	Gln	Pro	Leu	Ile	Ser	Leu	Cys	Glu	Ala	Pro	Pro	Ser	Pro	Leu	95	100	105
Gln	Leu	Pro	Gly	Gly	Asn	Val	Thr	Ile	Thr	Tyr	Ser	Tyr	Ala	Gly	110	115	120
Ala	Arg	Ala	Pro	Met	Gly	Gln	Gly	Phe	Leu	Leu	Ser	Tyr	Ser	Gln	125	130	135
Asp	Trp	Leu	Met	Cys	Leu	Gln	Glu	Glu	Phe	Gln	Cys	Leu	Asn	His	140	145	150
Arg	Cys	Val	Ser	Ala	Val	Gln	Arg	Cys	Asp	Gly	Val	Asp	Ala	Cys	155	160	165
Gly	Asp	Gly	Ser	Asp	Glu	Ala	Gly	Cys	Ser	Ser	Asp	Pro	Phe	Pro	170	175	180
Gly	Leu	Thr	Pro	Arg	Pro	Val	Pro	Ser	Leu	Pro	Cys	Asn	Val	Thr	185	190	195
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Pro	His	Asp	Gly	Arg	Arg	Leu	Ala	Val	Arg	Phe	Thr	Ala	Leu	Asp	230	235	240
Leu	Gly	Phe	Gly	Asp	Ala	Val	His	Val	Tyr	Asp	Gly	Pro	Gly	Pro	245	250	255
Pro	Glu	Ser	Ser	Arg	Leu	Leu	Arg	Ser	Leu	Thr	His	Phe	Ser	Asn	260	265	270
Gly	Lys	Ala	Val	Thr	Val	Glu	Thr	Leu	Ser	Gly	Gln	Ala	Val	Val	275	280	285
Ser	Tyr	His	Thr	Val	Ala	Trp	Ser	Asn	Gly	Arg	Gly	Phe	Asn	Ala	290	295	300
Thr	Tyr	His	Val	Arg	Gly	Tyr	Cys	Leu	Pro	Trp	Asp	Arg	Pro	Cys	305	310	315
Gly	Leu	Gly	Ser	Gly	Leu	Gly	Ala	Gly	Glu	Gly	Leu	Gly	Glu	Arg	320	325	330
Cys	Tyr	Ser	Glu	Ala	Gln	Arg	Cys	Asp	Gly	Ser	Trp	Asp	Cys	Ala	335	340	345
Asp	Gly	Thr	Asp	Glu	Glu	Asp	Cys	Pro	Gly	Cys	Pro	Pro	Gly	His			

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Phe Pro Cys Gly Ala Ala Gly Thr Ser Gly Ala Thr Ala Cys Tyr	365		370		375
Leu Pro Ala Asp Arg Cys Asn Tyr Gln Thr Phe Cys Ala Asp Gly	380		385		390
Ala Asp Glu Arg Arg Cys Arg His Cys Gln Pro Gly Asn Phe Arg	395		400		405
Cys Arg Asp Glu Lys Cys Val Tyr Glu Thr Trp Val Cys Asp Gly	410		415		420
Gln Pro Asp Cys Ala Asp Gly Ser Asp Glu Trp Asp Cys Ser Tyr	425		430		435
Val Leu Pro Arg Lys Val Ile Thr Ala Ala Val Ile Gly Ser Leu	440		445		450
Val Cys Gly Leu Leu Leu Val Ile Ala Leu Gly Cys Thr Cys Lys	455		460		465
Leu Tyr Ala Ile Arg Thr Gln Glu Tyr Ser Ile Phe Ala Pro Leu	470		475		480
Ser Arg Met Glu Ala Glu Ile Val Gln Gln Gln Ala Pro Pro Ser	485		490		495
Tyr Gly Gln Leu Ile Ala Gln Gly Ala Ile Pro Pro Val Glu Asp	500		505		510
Phe Pro Thr Glu Asn Pro Asn Asp Asn Ser Val Leu Gly Asn Leu	515		520		525
Arg Ser Leu Leu Gln Ile Leu Arg Gln Asp Met Thr Pro Gly Gly	530		535		540
Gly Pro Gly Ala Arg Arg Arg Gln Arg Gly Arg Leu Met Arg Arg	545		550		555
Leu Val Arg Arg Leu Arg Arg Trp Gly Leu Leu Pro Arg Thr Asn	560		565		570
Thr Pro Ala Arg Ala Ser Glu Ala Arg Ser Gln Val Thr Pro Ser	575		580		585
Ala Ala Pro Leu Glu Ala Leu Asp Gly Gly Thr Gly Pro Ala Arg	590		595		600
Glu Gly Gly Ala Val Gly Gly Gln Asp Gly Glu Gln Ala Pro Pro	605		610		615
Leu Pro Ile Lys Ala Pro Leu Pro Ser Ala Ser Thr Ser Pro Ala	620		625		630
Pro Thr Thr Val Pro Glu Ala Pro Gly Pro Leu Pro Ser Leu Pro	635		640		645

Leu Glu Pro Ser Leu Leu Ser Gly Val Val Gln Ala Leu Arg Gly
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 Arg Leu Leu Pro Ser Leu Gly Pro Pro Gly Pro Thr Arg Ser Pro
 665 670 675
 Pro Gly Pro His Thr Ala Val Leu Ala Leu Glu Asp Glu Asp Asp
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<212> PRT

<213> Homo Sapien

<400> 418

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Arg Ile Ala Arg Arg Ala Thr Ala Thr Met Ile Ala Gly Ser Leu
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Lys	Ala	Ser	Asn	Leu	Ile	Gly	Thr	Tyr	Arg	His	Val	Asp	Arg	Ala	
				50					55					60	
Thr	Gly	Gln	Val	Leu	Thr	Cys	Asp	Lys	Cys	Pro	Ala	Gly	Thr	Tyr	
				65					70					75	
Val	Ser	Glu	His	Cys	Thr	Asn	Thr	Ser	Leu	Arg	Val	Cys	Ser	Ser	
				80					85					90	
Cys	Pro	Val	Gly	Thr	Phe	Thr	Arg	His	Glu	Asn	Gly	Ile	Glu	Lys	
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Cys	His	Asp	Cys	Ser	Gln	Pro	Cys	Pro	Trp	Pro	Met	Ile	Glu	Lys	
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Leu	Pro	Cys	Ala	Ala	Leu	Thr	Asp	Arg	Glu	Cys	Thr	Cys	Pro	Pro	
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Gly	Met	Phe	Gln	Ser	Asn	Ala	Thr	Cys	Ala	Pro	His	Thr	Val	Cys	
				140					145					150	
Pro	Val	Gly	Trp	Gly	Val	Arg	Lys	Lys	Gly	Thr	Glu	Thr	Glu	Asp	
				155					160					165	
Val	Arg	Cys	Lys	Gln	Cys	Ala	Arg	Gly	Thr	Phe	Ser	Asp	Val	Pro	
				170					175					180	
Ser	Ser	Val	Met	Lys	Cys	Lys	Ala	Tyr	Thr	Asp	Cys	Leu	Ser	Gln	
				185					190					195	
Asn	Leu	Val	Val	Ile	Lys	Pro	Gly	Thr	Lys	Glu	Thr	Asp	Asn	Val	
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Cys	Gly	Thr	Leu	Pro	Ser	Phe	Ser	Ser	Ser	Thr	Ser	Pro	Ser	Pro	
				215					220					225	
Gly	Thr	Ala	Ile	Phe	Pro	Arg	Pro	Glu	His	Met	Glu	Thr	His	Glu	
				230					235					240	
Val	Pro	Ser	Ser	Thr	Tyr	Val	Pro	Lys	Gly	Met	Asn	Ser	Thr	Glu	
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Ser	Asn	Ser	Ser	Ala	Ser	Val	Arg	Pro	Lys	Val	Leu	Ser	Ser	Ile	
				260					265					270	
Gln	Glu	Gly	Thr	Val	Pro	Asp	Asn	Thr	Ser	Ser	Ala	Arg	Gly	Lys	
				275					280					285	
Glu	Asp	Val	Asn	Lys	Thr	Leu	Pro	Asn	Leu	Gln	Val	Val	Asn	His	
				290					295					300	
Gln	Gln	Gly	Pro	His	His	Arg	His	Ile	Leu	Lys	Leu	Leu	Pro	Ser	
				305					310					315	
Met	Glu	Ala	Thr	Gly	Gly	Glu	Lys	Ser	Ser	Thr	Pro	Ile	Lys	Gly	

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Pro Lys Arg Gly His	Pro Arg Gln Asn Leu His Lys His Phe Asp	
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Ile Asn Glu His Leu	Pro Trp Met Ile Val Leu Phe Leu Leu Leu	
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Val Leu Val Val Ile	Val Val Cys Ser Ile Arg Lys Ser Ser Arg	
365	370	375
Thr Leu Lys Lys Gly	Pro Arg Gln Asp Pro Ser Ala Ile Val Glu	
380	385	390
Lys Ala Gly Leu Lys	Lys Ser Met Thr Pro Thr Gln Asn Arg Glu	
395	400	405
Lys Trp Ile Tyr Tyr	Cys Asn Gly His Gly Ile Asp Ile Leu Lys	
410	415	420
Leu Val Ala Ala Gln	Val Gly Ser Gln Trp Lys Asp Ile Tyr Gln	
425	430	435
Phe Leu Cys Asn Ala	Ser Glu Arg Glu Val Ala Ala Phe Ser Asn	
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Gly Tyr Thr Ala Asp	His Glu Arg Ala Tyr Ala Ala Leu Gln His	
455	460	465
Trp Thr Ile Arg Gly	Pro Glu Ala Ser Leu Ala Gln Leu Ile Ser	
470	475	480
Ala Leu Arg Gln His	Arg Arg Asn Asp Val Val Glu Lys Ile Arg	
485	490	495
Gly Leu Met Glu Asp	Thr Thr Gln Leu Glu Thr Asp Lys Leu Ala	
500	505	510
Leu Pro Met Ser Pro	Ser Pro Leu Ser Pro Ser Pro Ile Pro Ser	
515	520	525
Pro Asn Ala Lys Leu	Glu Asn Ser Ala Leu Leu Thr Val Glu Pro	
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Ser Pro Gln Asp Lys	Asn Lys Gly Phe Phe Val Asp Glu Ser Glu	
545	550	555
Pro Leu Leu Arg Cys	Asp Ser Thr Ser Ser Gly Ser Ser Ala Leu	
560	565	570
Ser Arg Asn Gly Ser	Phe Ile Thr Lys Glu Lys Lys Asp Thr Val	
575	580	585
Leu Arg Gln Val Arg	Leu Asp Pro Cys Asp Leu Gln Pro Ile Phe	
590	595	600
Asp Asp Met Leu His	Phe Leu Asn Pro Glu Glu Leu Arg Val Ile	
605	610	615

Glu	Glu	Ile	Pro	Gln	Ala	Glu	Asp	Lys	Leu	Asp	Arg	Leu	Phe	Glu
				620					625					630
Ile	Ile	Gly	Val	Lys	Ser	Gln	Glu	Ala	Ser	Gln	Thr	Leu	Leu	Asp
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<210> 420

<211> 736

<212> PRT

<213> Homo Sapien

<400> 420

Met Asn Val Ala Leu Gln Glu Leu Gly Ala Gly Ser Asn Val Gly
1 5 10 15

Phe Gln Lys Gly Thr Arg Gln Leu Leu Gly Ser Arg Thr Gln Leu
20 25 30

Glu Leu Val Leu Ala Gly Ala Ser Leu Leu Leu Ala Ala Leu Leu
35 40 45

Leu Gly Cys Leu Val Ala Leu Gly Val Gln Tyr His Arg Asp Pro
50 55 60

Ser His Ser Thr Cys Leu Thr Glu Ala Cys Ile Arg Val Ala Gly
65 70 75

Lys Ile Leu Glu Ser Leu Asp Arg Gly Val Ser Pro Cys Glu Asp
80 85 90

Phe Tyr Gln Phe Ser Cys Gly Gly Trp Ile Arg Arg Asn Pro Leu
95 100 105

Pro Asp Gly Arg Ser Arg Trp Asn Thr Phe Asn Ser Leu Trp Asp
110 115 120

Gln Asn Gln Ala Ile Leu Lys His Leu Leu Glu Asn Thr Thr Phe
125 130 135

Asn Ser Ser Ser Glu Ala Glu Gln Lys Thr Gln Arg Phe Tyr Leu
140 145 150

Ser Cys Leu Gln Val Glu Arg Ile Glu Glu Leu Gly Ala Gln Pro
155 160 165

Leu Arg Asp Leu Ile Glu Lys Ile Gly Gly Trp Asn Ile Thr Gly
170 175 180

Pro Trp Asp Gln Asp Asn Phe Met Glu Val Leu Lys Ala Val Ala
185 190 195

Gly Thr Tyr Arg Ala Thr Pro Phe Phe Thr Val Tyr Ile Ser Ala
200 205 210

Asp Ser Lys Ser Ser Asn Ser Asn Val Ile Gln Val Asp Gln Ser
215 220 225

Gly Leu Phe Leu Pro Ser Arg Asp Tyr Tyr Leu Asn Arg Thr Ala
230 235 240

Asn	Glu	Lys	Val	Leu	Thr	Ala	Tyr	Leu	Asp	Tyr	Met	Glu	Glu	Leu		
				245					250					255		
Gly	Met	Leu	Leu	Gly	Gly	Arg	Pro	Thr	Ser	Thr	Arg	Glu	Gln	Met		
				260					265					270		
Gln	Gln	Val	Leu	Glu	Leu	Glu	Ile	Gln	Leu	Ala	Asn	Ile	Thr	Val		
				275					280					285		
Pro	Gln	Asp	Gln	Arg	Arg	Asp	Glu	Glu	Lys	Ile	Tyr	His	Lys	Met		
				290					295					300		
Ser	Ile	Ser	Glu	Leu	Gln	Ala	Leu	Ala	Pro	Ser	Met	Asp	Trp	Leu		
				305					310					315		
Glu	Phe	Leu	Ser	Phe	Leu	Leu	Ser	Pro	Leu	Glu	Leu	Ser	Asp	Ser		
				320					325					330		
Glu	Pro	Val	Val	Val	Tyr	Gly	Met	Asp	Tyr	Leu	Gln	Gln	Val	Ser		
				335					340					345		
Glu	Leu	Ile	Asn	Arg	Thr	Glu	Pro	Ser	Ile	Leu	Asn	Asn	Tyr	Leu		
				350					355					360		
Ile	Trp	Asn	Leu	Val	Gln	Lys	Thr	Thr	Ser	Ser	Leu	Asp	Arg	Arg		
				365					370					375		
Phe	Glu	Ser	Ala	Gln	Glu	Lys	Leu	Leu	Glu	Thr	Leu	Tyr	Gly	Thr		
				380					385					390		
Lys	Lys	Ser	Cys	Val	Pro	Arg	Trp	Gln	Thr	Cys	Ile	Ser	Asn	Thr		
				395					400					405		
Asp	Asp	Ala	Leu	Gly	Phe	Ala	Leu	Gly	Ser	Leu	Phe	Val	Lys	Ala		
				410					415					420		
Thr	Phe	Asp	Arg	Gln	Ser	Lys	Glu	Ile	Ala	Glu	Gly	Met	Ile	Ser		
				425					430					435		
Glu	Ile	Arg	Thr	Ala	Phe	Glu	Glu	Ala	Leu	Gly	Gln	Leu	Val	Trp		
				440					445					450		
Met	Asp	Glu	Lys	Thr	Arg	Gln	Ala	Ala	Lys	Glu	Lys	Ala	Asp	Ala		
				455					460					465		
Ile	Tyr	Asp	Met	Ile	Gly	Phe	Pro	Asp	Phe	Ile	Leu	Glu	Pro	Lys		
				470					475					480		
Glu	Leu	Asp	Asp	Val	Tyr	Asp	Gly	Tyr	Glu	Ile	Ser	Glu	Asp	Ser		
				485					490					495		
Phe	Phe	Gln	Asn	Met	Leu	Asn	Leu	Tyr	Asn	Phe	Ser	Ala	Lys	Val		
				500					505					510		
Met	Ala	Asp	Gln	Leu	Arg	Lys	Pro	Pro	Ser	Arg	Asp	Gln	Trp	Ser		
				515					520					525		
Met	Thr	Pro	Gln	Thr	Val	Asn	Ala	Tyr	Tyr	Leu	Pro	Thr	Lys	Asn		

530										535					540				
Glu	Ile	Val	Phe	Pro	Ala	Gly	Ile	Leu	Gln	Ala	Pro	Phe	Tyr	Ala					
				545					550					555					
Arg	Asn	His	Pro	Lys	Ala	Leu	Asn	Phe	Gly	Gly	Ile	Gly	Val	Val					
				560					565					570					
Met	Gly	His	Glu	Leu	Thr	His	Ala	Phe	Asp	Asp	Gln	Gly	Arg	Glu					
				575					580					585					
Tyr	Asp	Lys	Glu	Gly	Asn	Leu	Arg	Pro	Trp	Trp	Gln	Asn	Glu	Ser					
				590					595					600					
Leu	Ala	Ala	Phe	Arg	Asn	His	Thr	Ala	Cys	Met	Glu	Glu	Gln	Tyr					
				605					610					615					
Asn	Gln	Tyr	Gln	Val	Asn	Gly	Glu	Arg	Leu	Asn	Gly	Arg	Gln	Thr					
				620					625					630					
Leu	Gly	Glu	Asn	Ile	Thr	Asp	Asn	Gly	Gly	Leu	Lys	Ala	Ala	Tyr					
				635					640					645					
Asn	Ala	Tyr	Lys	Ala	Trp	Leu	Arg	Lys	His	Gly	Glu	Glu	Gln	Gln					
				650					655					660					
Leu	Pro	Ala	Val	Gly	Leu	Thr	Asn	His	Gln	Leu	Phe	Phe	Val	Gly					
				665					670					675					
Phe	Ala	Gln	Val	Trp	Cys	Ser	Val	Arg	Thr	Pro	Glu	Ser	Ser	His					
				680					685					690					
Glu	Gly	Leu	Val	Thr	Asp	Pro	His	Ser	Pro	Ala	Arg	Phe	Arg	Val					
				695					700					705					
Leu	Gly	Thr	Leu	Ser	Asn	Ser	Arg	Asp	Phe	Leu	Arg	His	Phe	Gly					
				710					715					720					
Cys	Pro	Val	Gly	Ser	Pro	Met	Asn	Pro	Gly	Gln	Leu	Cys	Glu	Val					
				725					730					735					

Trp

<210> 421
 <211> 1524
 <212> DNA
 <213> Homo Sapien

<400> 421
 ggcgcgcgct aggcccgagg ggcgcgggccc gccgggctgc gagcgctgc 50
 cccatgcgcc gccgcctctc cgcacgatgt tcccctcgcg gaggaaagcg 100
 gcgcagctgc cctgggagga cggcaggtcc gggttgctct ccggcggcct 150
 ccctcggaag tgttcgctct tccacctgtt cgtggcctgc ctctcgtgg 200

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647

Gly Leu Asn Thr Val Lys Tyr His Val Ala Ser Arg Thr Ala Leu
 290 295 300

Ser Val Gly Gly Ala Pro Cys Thr Val Leu Asn Ile Met Leu Asp
 305 310 315

Cys Asp Lys Thr Ala Thr Pro Trp Cys Thr Phe Ser
 320 325

<210> 423

<211> 859

<212> DNA

<213> Homo Sapien

<400> 423

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 gccctgcccc gtgtgtcctg gatgctgctt tcctgcctca ttctcctgtg 150
 tcagggttcaa ggtgaagaaa ccagaagga actgccctct ccacggatca 200
 gctgtcccaa aggctccaag gcctatggct cccctgcta tgccttgttt 250
 ttgtcaccaa aatcctggat ggatgcagat ctggcttgcc agaagcggcc 300
 ctctggaaaa ctggtgtctg tgctcagtgg ggctgagggg tccttcgtgt 350
 cctccctggt gaggagcatt agtaacagct actcatacat ctggattggg 400
 ctccatgacc ccacacaggg ctctgagcct gatggagatg gatgggagtg 450
 gagtagcact gatgtgatga attactttgc atgggagaaa aatccctcca 500
 ccatcttaaa ccctggccac tgtgggagcc tgtcaagaag cacaggattt 550
 ctgaagtgga aagattataa ctgtgatgca aagttaccct atgtctgcaa 600
 gttcaaggac tagggcaggt gggaagtcag cagcctcagc ttggcgtgca 650
 gctcatcatg gacatgagac cagtgtgaag actcaccctg gaagagaata 700
 ttctcccaaa actgccttac ctgactacct tgtcatgac ctccttcttt 750
 ttcttttttc ttcaccttca ttccaggctt ttctctgtct tccatgtctt 800
 gagatctcag agaataataa taaaaatggt actttataaa aaaaaaaaaa 850
 aaaaaaaaaa 859

<210> 424

<211> 175

<212> PRT

<213> Homo Sapien

<400> 424

Met Leu Pro Pro Met Ala Leu Pro Ser Val Ser Trp Met Leu Leu

1	5	10	15
Ser Cys Leu Ile Leu Leu Cys Gln Val Gln Gly Glu Glu Thr Gln	20	25	30
Lys Glu Leu Pro Ser Pro Arg Ile Ser Cys Pro Lys Gly Ser Lys	35	40	45
Ala Tyr Gly Ser Pro Cys Tyr Ala Leu Phe Leu Ser Pro Lys Ser	50	55	60
Trp Met Asp Ala Asp Leu Ala Cys Gln Lys Arg Pro Ser Gly Lys	65	70	75
Leu Val Ser Val Leu Ser Gly Ala Glu Gly Ser Phe Val Ser Ser	80	85	90
Leu Val Arg Ser Ile Ser Asn Ser Tyr Ser Tyr Ile Trp Ile Gly	95	100	105
Leu His Asp Pro Thr Gln Gly Ser Glu Pro Asp Gly Asp Gly Trp	110	115	120
Glu Trp Ser Ser Thr Asp Val Met Asn Tyr Phe Ala Trp Glu Lys	125	130	135
Asn Pro Ser Thr Ile Leu Asn Pro Gly His Cys Gly Ser Leu Ser	140	145	150
Arg Ser Thr Gly Phe Leu Lys Trp Lys Asp Tyr Asn Cys Asp Ala	155	160	165
Lys Leu Pro Tyr Val Cys Lys Phe Lys Asp	170	175	

<210> 425
 <211> 1227
 <212> DNA
 <213> Homo Sapien

<400> 425
 cggacgcgtg ggccgccacc tccggaacaa gccatggtgg cggcgacggt 50
 ggcagcggcg tggctgctcc tgtgggctgc ggctgcgcg cagcaggagc 100
 aggacttcta cgacttcaag gcggtcaaca tccggggcaa actggtgtcg 150
 ctggagaagt accgcggatc ggtgtccctg gtggtgaatg tggccagcga 200
 gtgcggcttc acagaccagc actaccgagc cctgcagcag ctgcagcgag 250
 acctggggccc ccaccacttt aacgtgctcg ccttcccctg caaccagttt 300
 ggccaacagg agcctgacag caacaaggag attgagagct ttgcccgcg 350
 cacctacagt gtctcattcc ccatgttttag caagattgca gtcaccggtg 400
 ctggtgcccc tctgccttc aagtacctgg cccagacttc tgggaaggag 450

cccacctgga atttctggaa gtacctagta gcccagatg gaaaggtggt 500
 aggggcttgg gacccaactg tgtcagtgga ggaggtcaga cccagatca 550
 cagcgtctgt gaggaagctc atcctactga agcgagaaga cttataacca 600
 ccgctgtctc tctccacca cctcatcccg cccacctgtg tggggctgac 650
 caatgcaaac tcaaattggtg cttcaaaggg agagaccac tgactctcct 700
 tcttttactc ttatgccatt ggtcccatca ttcttgtggg ggaaaaattc 750
 tagtattttg attatttgaa tcttacagca acaaatagga actcctggcc 800
 aatgagagct cttgaccagt gaatcaccag ccgatacgaa cgtcttgcca 850
 acaaaaatgt gtggcaaata gaagtatatc aagcaataat ctcccaccca 900
 aggcttctgt aaactgggac caatgattac ctcatagggc tgttgtgagg 950
 attagatga aatacctgtg aaagtgccta ggcagtgcc a gccaatagg 1000
 aggcatcaca tgaacatttt ttgcatataa accaaaaaat aacttggtat 1050
 caataaaaac ttgcatccaa catgaatttc cagccgatga taatccaggc 1100
 caaagggtta gttgttgta tttcctctgt attattttct tcattacaaa 1150
 agaaatgcaa gttcattgta acaatccaaa caatacctca cgatataaaa 1200
 taaaaatgaa agtatcctcc tcaaaaa 1227

<210> 426

<211> 187

<212> PRT

<213> Homo Sapien

<400> 426

Met	Val	Ala	Ala	Thr	Val	Ala	Ala	Ala	Trp	Leu	Leu	Leu	Trp	Ala
1				5					10					15
Ala	Ala	Cys	Ala	Gln	Gln	Glu	Gln	Asp	Phe	Tyr	Asp	Phe	Lys	Ala
				20					25					30
Val	Asn	Ile	Arg	Gly	Lys	Leu	Val	Ser	Leu	Glu	Lys	Tyr	Arg	Gly
				35					40					45
Ser	Val	Ser	Leu	Val	Val	Asn	Val	Ala	Ser	Glu	Cys	Gly	Phe	Thr
				50					55					60
Asp	Gln	His	Tyr	Arg	Ala	Leu	Gln	Gln	Leu	Gln	Arg	Asp	Leu	Gly
				65					70					75
Pro	His	His	Phe	Asn	Val	Leu	Ala	Phe	Pro	Cys	Asn	Gln	Phe	Gly
				80					85					90
Gln	Gln	Glu	Pro	Asp	Ser	Asn	Lys	Glu	Ile	Glu	Ser	Phe	Ala	Arg
				95					100					105

Arg	Thr	Tyr	Ser	Val	Ser	Phe	Pro	Met	Phe	Ser	Lys	Ile	Ala	Val
				110					115					120
Thr	Gly	Thr	Gly	Ala	His	Pro	Ala	Phe	Lys	Tyr	Leu	Ala	Gln	Thr
				125					130					135
Ser	Gly	Lys	Glu	Pro	Thr	Trp	Asn	Phe	Trp	Lys	Tyr	Leu	Val	Ala
				140					145					150
Pro	Asp	Gly	Lys	Val	Val	Gly	Ala	Trp	Asp	Pro	Thr	Val	Ser	Val
				155					160					165
Glu	Glu	Val	Arg	Pro	Gln	Ile	Thr	Ala	Leu	Val	Arg	Lys	Leu	Ile
				170					175					180
Leu	Leu	Lys	Arg	Glu	Asp	Leu								
				185										

<210> 427
 <211> 678
 <212> DNA
 <213> Homo Sapien

<400> 427
 cagttctgaa atcaatggag ttaatttagg gaatacaaac cagccatggg 50
 ggtggagatt gcctttgcct cagtgattct cacctgcctc tcccttctgg 100
 cagcaggagt ctcccagggt gttcttctcc agccagttcc aactcaggag 150
 acagggtcca aggccatggg agatctctcc tgtggctttg ccggccactc 200
 atgagagtgt ttttgtgtaa agtatttttt agaatactgt tgacttcttc 250
 atgatttaat aaccatcctt tgcgaagttt tatgaggctt taggggaatg 300
 tcaaccctca aatttttggt atactagatg gcttccattt acccaccact 350
 attttaagggt ccctttatct ttaggttcaa gggttcatttg acttgagaaa 400
 gtgcccttct gcagcttcat tgattttggt tatcttctact attaattgta 450
 acgattaaaa aagaataaga gcacgcagac ctctaggaga atattttatc 500
 cctgggtgcc cctgacacat ttatgtagtg atcccacaaa tgtgattggt 550
 aatttaaagt ttattctaatt attagtagat tcagttgtga tgtaatatga 600
 ataaccagaa tctatttctt aaaagttttg agtatatttt tcaactagat 650
 attgtatag aaagactgaa tagtgatg 678

<210> 428
 <211> 52
 <212> PRT
 <213> Homo Sapien

<400> 428

Met	Gly	Val	Glu	Ile	Ala	Phe	Ala	Ser	Val	Ile	Leu	Thr	Cys	Leu
1				5					10					15
Ser	Leu	Leu	Ala	Ala	Gly	Val	Ser	Gln	Val	Val	Leu	Leu	Gln	Pro
			20						25					30
Val	Pro	Thr	Gln	Glu	Thr	Gly	Pro	Lys	Ala	Met	Gly	Asp	Leu	Ser
			35						40					45
Cys	Gly	Phe	Ala	Gly	His	Ser								
				50										

<210> 429
 <211> 773
 <212> DNA
 <213> Homo Sapien

<400> 429
 ccaaagtgat catttgaaaa agagatatcc acatcttcaa gcccatataa 50
 aggatagaag ctgcacaggg cagctttact tactccagca ccttcctctc 100
 ccaggcaaat ggtgctgacc atctttggga tacaatctca tggatacgag 150
 gtttttaaca tcacagccc aagcaacaat ggtggcaatg ttcaggagac 200
 agtgacaatt gataatgaaa aaaataccgc catcgttaac atccatgcag 250
 gatcatgctc ttctaccaca atttttgact ataaacatgg ctacattgca 300
 tccagggtgc tctcccgaag agcctgcttt atcctgaaga tggaccatca 350
 gaacatccct cctctgaaca atctccaatg gtacatctat gagaaacagg 400
 ctctggacaa catgttctcc aacaaatata cctgggtcaa gtacaaccct 450
 ctggagtctc tgatcaaaga cgtggattgg ttctgcttg ggtcaccat 500
 tgagaaactc tgcaaacata tccctttgta taagggggaa gtggttgaaa 550
 acacacataa tgtcgggtgct ggaggctgtg caaaggctgg gtcctggggc 600
 atcttgggaa tttcaatctg tgcagacatt catgtttagg atgattagcc 650
 ctcttgtttt atcttttcaa agaaatacat ccttggttta cactcaaaag 700
 tcaaattaaa ttctttccca atgcccacac taattttgag attcagtcag 750
 aaaatataaa tgctgtattt ata 773

<210> 430
 <211> 176
 <212> PRT
 <213> Homo Sapien

<400> 430
 Met Val Leu Thr Ile Phe Gly Ile Gln Ser His Gly Tyr Glu Val
 1 5 10 15

Phe	Asn	Ile	Ile	Ser	Pro	Ser	Asn	Asn	Gly	Gly	Asn	Val	Gln	Glu	
				20					25					30	
Thr	Val	Thr	Ile	Asp	Asn	Glu	Lys	Asn	Thr	Ala	Ile	Val	Asn	Ile	
				35					40					45	
His	Ala	Gly	Ser	Cys	Ser	Ser	Thr	Thr	Ile	Phe	Asp	Tyr	Lys	His	
				50					55					60	
Gly	Tyr	Ile	Ala	Ser	Arg	Val	Leu	Ser	Arg	Arg	Ala	Cys	Phe	Ile	
				65					70					75	
Leu	Lys	Met	Asp	His	Gln	Asn	Ile	Pro	Pro	Leu	Asn	Asn	Leu	Gln	
				80					85					90	
Trp	Tyr	Ile	Tyr	Glu	Lys	Gln	Ala	Leu	Asp	Asn	Met	Phe	Ser	Asn	
				95					100					105	
Lys	Tyr	Thr	Trp	Val	Lys	Tyr	Asn	Pro	Leu	Glu	Ser	Leu	Ile	Lys	
				110					115					120	
Asp	Val	Asp	Trp	Phe	Leu	Leu	Gly	Ser	Pro	Ile	Glu	Lys	Leu	Cys	
				125					130					135	
Lys	His	Ile	Pro	Leu	Tyr	Lys	Gly	Glu	Val	Val	Glu	Asn	Thr	His	
				140					145					150	
Asn	Val	Gly	Ala	Gly	Gly	Cys	Ala	Lys	Ala	Gly	Leu	Leu	Gly	Ile	
				155					160					165	
Leu	Gly	Ile	Ser	Ile	Cys	Ala	Asp	Ile	His	Val					
				170					175						

<210> 431
 <211> 683
 <212> DNA
 <213> Homo Sapien

<400> 431
 gcgtggggat gtctaggagc tcgaaggtgg tgctgggcct ctcggtgctg 50
 ctgacggcgg ccacagtggc cggcgtacat gtgaagcagc agtgggacca 100
 gcagaggctt cgtgacggag ttatcagaga cattgagagg caaattcgga 150
 aaaaagaaaa cattcgtctt ttgggagaac agattatttt gactgagcaa 200
 cttgaagcag aaagagagaa gatgttattg gcaaaaaggat ctcaaaaatc 250
 atgacttgaa tgtgaaatat ctgttgga gacaacacga gtttgtgtgt 300
 gtgtgttgat ggagagtagc ttagtagtat cttcatcttt ttttttggtc 350
 actgtccttt taaacttgat caaataaagg acagtgggtc atataagtta 400
 ctgctttcag ggtcccttat atctgaataa aggagtgtgg gcagacactt 450
 tttggaagag tctgtctggg tgatcctggt agaagcccca ttagggtcac 500

tgtccagtgc ttagggttgt tactgagaag cactgccgag cttgtgagaa 550
 ggaagggatg gatagtagca tccacctgag tagtctgac agtcggcatg 600
 atgacgaagc caccagaaca tcgacctcag aaggactgga ggaaggtgaa 650
 gtggaggag agacgctcct gatcgtcgaa tcc 683

<210> 432
 <211> 81
 <212> PRT
 <213> Homo Sapien

<400> 432
 Met Ser Arg Ser Ser Lys Val Val Leu Gly Leu Ser Val Leu Leu
 1 5 10 15
 Thr Ala Ala Thr Val Ala Gly Val His Val Lys Gln Gln Trp Asp
 20 25 30
 Gln Gln Arg Leu Arg Asp Gly Val Ile Arg Asp Ile Glu Arg Gln
 35 40 45
 Ile Arg Lys Lys Glu Asn Ile Arg Leu Leu Gly Glu Gln Ile Ile
 50 55 60
 Leu Thr Glu Gln Leu Glu Ala Glu Arg Glu Lys Met Leu Leu Ala
 65 70 75
 Lys Gly Ser Gln Lys Ser
 80

<210> 433
 <211> 3608
 <212> DNA
 <213> Homo Sapien

<400> 433
 gaattcgtgt ctcggcactc actcccggcc gcccgacag ggagctttcg 50
 ctggcgcgct tggccggcga caggacaggt tcgggacgtc catctgtcca 100
 tccgtccgga gagaaattac agatccgcag ccccgggatg gggccggccc 150
 cgctgccgct gctgctgggc ctcttctctc ccgcgctctg gcgtagagct 200
 atcactgagg caagggaaga agccaagcct taccgctat tcccgggacc 250
 ttttccaggg agcctgcaaa ctgaccacac accgctgtta tcccttctctc 300
 acgccagtgg gtaccagcct gccttgatgt tttcaccaac ccagcctgga 350
 agaccacata caggaaacgt agccattccc caggtgacct ctgtcgaatc 400
 aaagccccta ccgcctcttg ccttcaaaca cacagttgga cacataatac 450
 tttctgaaca taaagggtgtc aaatttaatt gctcaatcaa tgtacctaat 500

atataccagg acaccacaat ttcttggtgg aaagatggga aggaattgct 550
 tgggggacat catcgaatta cacagtttta tccagatgat gaagttacag 600
 caataatcgc ttcttcagc ataaccagtg tgcagcgttc agacaatggg 650
 tcgtatatct gtaagatgaa aataaacaat gaagagatcg tgtctgatcc 700
 catctacatc gaagtacaag gacttctca ctttactaag cagcctgaga 750
 gcatgaatgt caccagaaac acagccttca acctcacctg tcaggctgtg 800
 ggcccgctg agcccgctcaa cattttcttg gttcaaaaaca gtagccgtgt 850
 taacgaacag cctgaaaaat ccccgccgt gctaactgtt ccaggcctga 900
 cggagatggc ggtcttcagt tgtgaggccc acaatgacaa agggctgacc 950
 gtgtcccagg gagtgcagat caacatcaaa gcaattccct cccaccaac 1000
 tgaagtcagc atccgtaaca gactgcaca cagcattctg atctcctggg 1050
 ttcttggttt tgatggatac tccccgttca ggaattgcag cattcaggtc 1100
 aaggaagctg atccgctggg taatggctca gtcagatgtt ttaacacctc 1150
 tgccttacca catctgtacc aaatcaagca gctgcaagcc ctggctaatt 1200
 acagcattgg tgtttcctgc atgaatgaaa taggctggtc tgcagtgagc 1250
 ccttgattc tagcaagcac gactgaagga gcccacacag tagcaccttt 1300
 aaatgtcact gtgtttctga atgaatctag tgataatgtg gacatcagat 1350
 ggatgaagcc tccgactaag cagcaggatg gagaactggt gggctaccgg 1400
 atatcccacg tgtggcagag tgcagggatt tccaaagagc tcttgaggga 1450
 agttggccag aatggcagcc gagctcggat ctctgttcaa gtccacaatg 1500
 ctacgtgcac agtgaggatt gcagccgtca ccagaggggg agttggggcc 1550
 ttcaagtatc cagtgaaaat atttatccct gcacacgggt gggtagatta 1600
 tgccccctct tcaactccgg cgctggcaa cgcagatcct gtgctcatca 1650
 tctttggtg cttttgtgga tttattttga ttgggttgat tttatacatc 1700
 tccttggtcca tcagaaaaag agtccaggag acaaagtttg ggaatgcatt 1750
 cacagaggag gattctgaat tagtggtgaa ttatatagca aagaaatcct 1800
 tctgtcggcg agccattgaa cttaccttac atagcttggg agtcagtgag 1850
 gaactacaaa ataaactaga agatgttgtg attgacagga atcttctaatt 1900
 tcttgaaaaa attctgggtg aaggagagtt tgggtctgta atggaaggaa 1950

atcttaagca ggaagatggg acctctctga aagtggcagt gaagaccatg 2000
aagttggaca actcttcaca tcgggagatc gaggagtttc tcagtgaggc 2050
agcgtgcatg aaagacttca gccacccaaa tgtcattcga cttctaggtg 2100
tgtgtataga aatgagctct caaggcatcc caaagcccat ggtaatttta 2150
cccttcatga aatacgggga cctgcatact tacttacttt attcccgatt 2200
ggagacagga ccaaagcata ttctcttgca gacactattg aagttcatgg 2250
tggatattgc cctgggaatg gagtatctga gcaacaggaa ttttcttcat 2300
cgagatttag ctgctcgaaa ctgcatgttg cgagatgaca tgactgtctg 2350
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gccaaaggccg cattgctaag atgcctgtta aatggatcgc catagaaagt 2450
cttgagacc gagtctacac aagtaaaagt gatgtgtggg catttggcgt 2500
gaccatgtgg gaaatacgtg cgcggggaat gactccctat cctgggggtcc 2550
agaaccatga gatgtatgac tatcttctcc atggccacag gttgaagcag 2600
cccgaagact gcctggatga actgtatgaa ataatgtact cttgctggag 2650
aaccgatccc ttagaccgcc ccaccttttc agtattgagg ctgcagctag 2700
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cacccttgct ccactggact tgaacatcga ccctgactct ataattgcct 2850
cctgcactcc ccgcgtgcc atcagtgtgg tcacagcaga agttcatgac 2900
agcaaacctc atgaaggacg gtacatcctg aatgggggca gtgaggaatg 2950
ggaagatctg acttctgccc cctctgctgc agtcacagct gaaaagaaca 3000
gtgttttacc gggggagaga cttgttagga atggggtctc ctggtcccat 3050
tcgagcatgc tgcccttggg aagctcattg cccgatgaac ttttgtttgc 3100
tgacgactcc tcagaaggct cagaagtcct gatgtgagga gaggtgcggg 3150
gagacattcc aaaaatcaag ccaattcttc tgctgtagga gaatccaatt 3200
gtacctgatg tttttggtat ttgtcttctt taccaagtga actccatggc 3250
cccaaagcac cagatgaatg ttgttaagga agctgtcatt aaaaatacat 3300
aatatatatt tatttaaaga gaaaaaatat gtgtatatca tgaaaaagac 3350
aaggatatat taataaaaca ttacttattt catttcactt atcttgcata 3400

tcttaaaatt aagcttcagc tgctccttga tattaacctt tgtacagagt 3450
 tgaagttggt ttttcaactt cttttctttt tcattactat taaatgtaaa 3500
 aatatttgta aaatgaaatg ccatatttga cttggcttct ggtcttgatg 3550
 tatttgataa gaatgattaa ttttctgata tggcttccat aataaaattg 3600
 aaatagga 3608

<210> 434
 <211> 999
 <212> PRT
 <213> Homo Sapien

<400> 434
 Met Gly Pro Ala Pro Leu Pro Leu Leu Leu Gly Leu Phe Leu Pro
 1 5 10 15
 Ala Leu Trp Arg Arg Ala Ile Thr Glu Ala Arg Glu Glu Ala Lys
 20 25 30
 Pro Tyr Pro Leu Phe Pro Gly Pro Phe Pro Gly Ser Leu Gln Thr
 35 40 45
 Asp His Thr Pro Leu Leu Ser Leu Pro His Ala Ser Gly Tyr Gln
 50 55 60
 Pro Ala Leu Met Phe Ser Pro Thr Gln Pro Gly Arg Pro His Thr
 65 70 75
 Gly Asn Val Ala Ile Pro Gln Val Thr Ser Val Glu Ser Lys Pro
 80 85 90
 Leu Pro Pro Leu Ala Phe Lys His Thr Val Gly His Ile Ile Leu
 95 100 105
 Ser Glu His Lys Gly Val Lys Phe Asn Cys Ser Ile Asn Val Pro
 110 115 120
 Asn Ile Tyr Gln Asp Thr Thr Ile Ser Trp Trp Lys Asp Gly Lys
 125 130 135
 Glu Leu Leu Gly Gly His His Arg Ile Thr Gln Phe Tyr Pro Asp
 140 145 150
 Asp Glu Val Thr Ala Ile Ile Ala Ser Phe Ser Ile Thr Ser Val
 155 160 165
 Gln Arg Ser Asp Asn Gly Ser Tyr Ile Cys Lys Met Lys Ile Asn
 170 175 180
 Asn Glu Glu Ile Val Ser Asp Pro Ile Tyr Ile Glu Val Gln Gly
 185 190 195
 Leu Pro His Phe Thr Lys Gln Pro Glu Ser Met Asn Val Thr Arg
 200 205 210

Asn Thr Ala Phe	Asn Leu Thr Cys Gln	Ala Val Gly Pro Pro	Glu
215	220		225
Pro Val Asn Ile	Phe Trp Val Gln Asn	Ser Ser Arg Val Asn	Glu
230	235		240
Gln Pro Glu Lys	Ser Pro Gly Val Leu	Thr Val Pro Gly Leu	Thr
245	250		255
Glu Met Ala Val	Phe Ser Cys Glu Ala	His Asn Asp Lys Gly	Leu
260	265		270
Thr Val Ser Gln	Gly Val Gln Ile Asn	Ile Lys Ala Ile Pro	Ser
275	280		285
Pro Pro Thr Glu	Val Ser Ile Arg Asn	Ser Thr Ala His Ser	Ile
290	295		300
Leu Ile Ser Trp	Val Pro Gly Phe Asp	Gly Tyr Ser Pro Phe	Arg
305	310		315
Asn Cys Ser Ile	Gln Val Lys Glu Ala	Asp Pro Leu Gly Asn	Gly
320	325		330
Ser Val Met Ile	Phe Asn Thr Ser Ala	Leu Pro His Leu Tyr	Gln
335	340		345
Ile Lys Gln Leu	Gln Ala Leu Ala Asn	Tyr Ser Ile Gly Val	Ser
350	355		360
Cys Met Asn Glu	Ile Gly Trp Ser Ala	Val Ser Pro Trp Ile	Leu
365	370		375
Ala Ser Thr Thr	Glu Gly Ala Pro Ser	Val Ala Pro Leu Asn	Val
380	385		390
Thr Val Phe Leu	Asn Glu Ser Ser Asp	Asn Val Asp Ile Arg	Trp
395	400		405
Met Lys Pro Pro	Thr Lys Gln Gln Asp	Gly Glu Leu Val Gly	Tyr
410	415		420
Arg Ile Ser His	Val Trp Gln Ser Ala	Gly Ile Ser Lys Glu	Leu
425	430		435
Leu Glu Glu Val	Gly Gln Asn Gly Ser	Arg Ala Arg Ile Ser	Val
440	445		450
Gln Val His Asn	Ala Thr Cys Thr Val	Arg Ile Ala Ala Val	Thr
455	460		465
Arg Gly Gly Val	Gly Pro Phe Ser Asp	Pro Val Lys Ile Phe	Ile
470	475		480
Pro Ala His Gly	Trp Val Asp Tyr Ala	Pro Ser Ser Thr Pro	Ala
485	490		495
Pro Gly Asn Ala	Asp Pro Val Leu Ile	Ile Phe Gly Cys Phe	Cys

500	505	510
Gly Phe Ile Leu Ile Gly Leu Ile Leu Tyr Ile Ser Leu Ala Ile		
515	520	525
Arg Lys Arg Val Gln Glu Thr Lys Phe Gly Asn Ala Phe Thr Glu		
530	535	540
Glu Asp Ser Glu Leu Val Val Asn Tyr Ile Ala Lys Lys Ser Phe		
545	550	555
Cys Arg Arg Ala Ile Glu Leu Thr Leu His Ser Leu Gly Val Ser		
560	565	570
Glu Glu Leu Gln Asn Lys Leu Glu Asp Val Val Ile Asp Arg Asn		
575	580	585
Leu Leu Ile Leu Gly Lys Ile Leu Gly Glu Gly Glu Phe Gly Ser		
590	595	600
Val Met Glu Gly Asn Leu Lys Gln Glu Asp Gly Thr Ser Leu Lys		
605	610	615
Val Ala Val Lys Thr Met Lys Leu Asp Asn Ser Ser His Arg Glu		
620	625	630
Ile Glu Glu Phe Leu Ser Glu Ala Ala Cys Met Lys Asp Phe Ser		
635	640	645
His Pro Asn Val Ile Arg Leu Leu Gly Val Cys Ile Glu Met Ser		
650	655	660
Ser Gln Gly Ile Pro Lys Pro Met Val Ile Leu Pro Phe Met Lys		
665	670	675
Tyr Gly Asp Leu His Thr Tyr Leu Leu Tyr Ser Arg Leu Glu Thr		
680	685	690
Gly Pro Lys His Ile Pro Leu Gln Thr Leu Leu Lys Phe Met Val		
695	700	705
Asp Ile Ala Leu Gly Met Glu Tyr Leu Ser Asn Arg Asn Phe Leu		
710	715	720
His Arg Asp Leu Ala Ala Arg Asn Cys Met Leu Arg Asp Asp Met		
725	730	735
Thr Val Cys Val Ala Asp Phe Gly Leu Ser Lys Lys Ile Tyr Ser		
740	745	750
Gly Asp Tyr Tyr Arg Gln Gly Arg Ile Ala Lys Met Pro Val Lys		
755	760	765
Trp Ile Ala Ile Glu Ser Leu Ala Asp Arg Val Tyr Thr Ser Lys		
770	775	780
Ser Asp Val Trp Ala Phe Gly Val Thr Met Trp Glu Ile Arg Thr		
785	790	795

Arg Gly Met Thr Pro Tyr Pro Gly Val Gln Asn His Glu Met Tyr
800 805 810

Asp Tyr Leu Leu His Gly His Arg Leu Lys Gln Pro Glu Asp Cys
815 820 825

Leu Asp Glu Leu Tyr Glu Ile Met Tyr Ser Cys Trp Arg Thr Asp
830 835 840

Pro Leu Asp Arg Pro Thr Phe Ser Val Leu Arg Leu Gln Leu Glu
845 850 855

Lys Leu Leu Glu Ser Leu Pro Asp Val Arg Asn Gln Ala Asp Val
860 865 870

Ile Tyr Val Asn Thr Gln Leu Leu Glu Ser Ser Glu Gly Leu Ala
875 880 885

Gln Gly Pro Thr Leu Ala Pro Leu Asp Leu Asn Ile Asp Pro Asp
890 895 900

Ser Ile Ile Ala Ser Cys Thr Pro Arg Ala Ala Ile Ser Val Val
905 910 915

Thr Ala Glu Val His Asp Ser Lys Pro His Glu Gly Arg Tyr Ile
920 925 930

Leu Asn Gly Gly Ser Glu Glu Trp Glu Asp Leu Thr Ser Ala Pro
935 940 945

Ser Ala Ala Val Thr Ala Glu Lys Asn Ser Val Leu Pro Gly Glu
950 955 960

Arg Leu Val Arg Asn Gly Val Ser Trp Ser His Ser Ser Met Leu
965 970 975

Pro Leu Gly Ser Ser Leu Pro Asp Glu Leu Leu Phe Ala Asp Asp
980 985 990

Ser Ser Glu Gly Ser Glu Val Leu Met
995

<210> 435
<211> 1869
<212> DNA
<213> Homo Sapien

<400> 435
aatgtgagag gggctgatgg aagctgatag gcaggactgg agtgtagca 50
ccagtactgg atgtgacagc aggcagagga gcacttagca gcttattcag 100
tgtccgattc tgattccggc aaggatccaa gcatggaatg ctgccgtcgg 150
gcaactcctg gcacactgct cctctttctg gctttcctgc tcctgagttc 200
caggaccgca cgctccgagg aggaccggga cggcctatgg gatgcctggg 250

gcccatggag tgaatgctca cgcacctgcg ggggaggggc ctctactct 300
 ctgaggcgct gcctgagcag caagagctgt gaaggaagaa atatccgata 350
 cagaacatgc agtaatgtgg actgcccacc agaagcaggt gatttccgag 400
 ctcagcaatg ctcagctcat aatgatgtca agcaccatgg ccagttttat 450
 gaatggcttc ctgtgtctaa tgaccctgac aacccatgtt cactcaagtg 500
 ccaagccaaa ggaacaaccc tggttgttga actagcacct aaggtcttag 550
 atggtacgcy ttgctataca gaatctttgg atatgtgcat cagtggttta 600
 tgccaaattg ttggctgcga tcaccagctg ggaagcaccg tcaaggaaga 650
 taactgtggg gtctgcaacg gagatgggtc cacctgccgg ctggtccgag 700
 ggcagtataa atcccagctc tccgcaacca aatcgatga tactgtggtt 750
 gcacttcctt atggaagtag acatattcgc cttgtcttaa aaggctctga 800
 tcacttatat ctggaaacca aaacctcca ggggactaaa ggtgaaaaca 850
 gtctcagctc cacaggaact ttccttgtgg acaattctag tgtggacttc 900
 cagaaatttc cagacaaaga gatactgaga atggctggac cactcacagc 950
 agatttcatt gtcaagattc gtaactcggg ctccgctgac agtacagtcc 1000
 agttcatctt ctatcaaccc atcatccacc gatggaggga gacggatttc 1050
 tttccttget cagcaacctg tggaggaggt tatcagctga catcggtctga 1100
 gtgctacgat ctgaggagca accgtgtggt tgctgaccaa tactgtcact 1150
 attaccaga gaacatcaaa cccaaaccca agcttcagga gtgcaacttg 1200
 gatccttgct cagccagtga cggatacaag cagatcatgc cttatgacct 1250
 ctaccatccc ctctctcggg gggaggccac cccatggacc gcgtgctcct 1300
 cctcgtgtgg ggggggcac cagagccggg cagtttcctg tgtggaggag 1350
 gacatccagg ggcattgtac ttcagtggaa gagtggaaat gcatgtacac 1400
 ccctaagatg cccatcgcgc agccctgcaa catttttgac tgccctaaat 1450
 ggctggcaca ggagtggctc ccgtgcacag tgacatgtgg ccagggcctc 1500
 agataccgtg tggctcctctg catcgaccat cgaggaatgc acacaggagg 1550
 ctgtagccca aaaacaaagc cccacataaa agaggaatgc atcgtaccca 1600
 ctccctgcta taaacccaaa gagaaacttc cagtcgaggc caagttgcca 1650
 tggttcaaac aagctcaaga gctagaagaa ggagctgctg tgtcagagga 1700

gccctcgtaa gttgtaaaag cacagactgt tctatatttg aaactgtttt 1750
 gtttaaagaa agcagtgtct cactgggtgt agctttcatg ggttctgaac 1800
 taagtgaat catctcacca aagctttttg gctctcaa at taaagattga 1850
 ttagtttcaa aaaaaaaaaa 1869

<210> 436
 <211> 525
 <212> PRT
 <213> Homo Sapien

<400> 436
 Met Glu Cys Cys Arg Arg Ala Thr Pro Gly Thr Leu Leu Leu Phe
 1 5 10 15
 Leu Ala Phe Leu Leu Leu Ser Ser Arg Thr Ala Arg Ser Glu Glu
 20 25 30
 Asp Arg Asp Gly Leu Trp Asp Ala Trp Gly Pro Trp Ser Glu Cys
 35 40 45
 Ser Arg Thr Cys Gly Gly Gly Ala Ser Tyr Ser Leu Arg Arg Cys
 50 55 60
 Leu Ser Ser Lys Ser Cys Glu Gly Arg Asn Ile Arg Tyr Arg Thr
 65 70 75
 Cys Ser Asn Val Asp Cys Pro Pro Glu Ala Gly Asp Phe Arg Ala
 80 85 90
 Gln Gln Cys Ser Ala His Asn Asp Val Lys His His Gly Gln Phe
 95 100 105
 Tyr Glu Trp Leu Pro Val Ser Asn Asp Pro Asp Asn Pro Cys Ser
 110 115 120
 Leu Lys Cys Gln Ala Lys Gly Thr Thr Leu Val Val Glu Leu Ala
 125 130 135
 Pro Lys Val Leu Asp Gly Thr Arg Cys Tyr Thr Glu Ser Leu Asp
 140 145 150
 Met Cys Ile Ser Gly Leu Cys Gln Ile Val Gly Cys Asp His Gln
 155 160 165
 Leu Gly Ser Thr Val Lys Glu Asp Asn Cys Gly Val Cys Asn Gly
 170 175 180
 Asp Gly Ser Thr Cys Arg Leu Val Arg Gly Gln Tyr Lys Ser Gln
 185 190 195
 Leu Ser Ala Thr Lys Ser Asp Asp Thr Val Val Ala Leu Pro Tyr
 200 205 210
 Gly Ser Arg His Ile Arg Leu Val Leu Lys Gly Pro Asp His Leu
 215 220 225

<210> 437
 <211> 1158
 <212> DNA
 <213> Homo Sapien

<400> 437
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 cttggtctcc tgtctttatg tctttctcct cttcctattc tgtcatctcc 100
 ctcaacttaag tctcaggcct gtcagcagct cctgtggaca ttgccatccc 150
 ctctggtagc cttcagagca aacaggacaa cctatgttat ggatgtttcc 200
 accaaccagg gtagtggcat ggagcacctg aaccatctgt gcttctgtga 250
 tctctatgac agagccactt ctccacctct gaaatgttcc ctgctctgaa 300
 atctggcatg agatggcaca ggtgaccacg cagaagccac cagaatcttg 350
 cctgccctat tctcctccc aagtctgttc tcttattgtc aacctcagca 400
 caacaggctg gcgccaatgg cattacagag aaagcaatct gtgtggctag 450
 tgggcagatt accatgcaag ccccaggaga aatggaggag cttttagacc 500
 acctccctgt cagccagtat taacatgtcc ccttccccct gccccgccgt 550
 agattcagga cattcgcccc tgtgtgccac caaaccagga ctttccccct 600
 ggcttggcat ccttggctct ctctgggtac ccagcaagac gtctgttcca 650
 gggcagtgtg gcatctttca agctccgtta ctatggcgat ggccatgatg 700
 ttacaatccc acttgcctga ataataaagt gggaagggga agcagagggga 750
 aatggggcca tgtgaatgca gctgctctgt tctccctacc ctgaggaaaa 800
 accaaaggga agcaacagga acttctgcaa ctgggtttta tcggaaagat 850
 catcctgcct gcagatgctg ttgaaggggc acaagaaatg tagctggaga 900
 agattgatga aagtgcaggt gtgtaaggaa atagaacagt ctgctgggag 950
 tcagacctgg aattctgatt ccaaactctt tattactttg ggaagtcaact 1000
 cagcctcccc gtagccatct ccagggtgac ggaacccagt gtattacctg 1050
 ctggaaccaa ggaaactaac aatgtaggtt actagtgaat accccaatgg 1100
 tttctccaat tatgcccatt ccacaaaaac aataaaacaa aattctctaa 1150
 cactgaaa 1158

<210> 438
 <211> 86

<212> PRT
<213> Homo Sapien

<400> 438
Met Trp Leu Pro Leu Gly Leu Leu Ser Leu Cys Leu Ser Pro Leu
1 5 10 15
Pro Ile Leu Ser Ser Pro Ser Leu Lys Ser Gln Ala Cys Gln Gln
20 25 30
Leu Leu Trp Thr Leu Pro Ser Pro Leu Val Ala Phe Arg Ala Asn
35 40 45
Arg Thr Thr Tyr Val Met Asp Val Ser Thr Asn Gln Gly Ser Gly
50 55 60
Met Glu His Arg Asn His Leu Cys Phe Cys Asp Leu Tyr Asp Arg
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<212> DNA
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 Val Gln Lys Pro Gly Gly Thr Val Ile Leu Gly Cys Val Val Glu
 50 55 60
 Pro Pro Arg Met Asn Val Thr Trp Arg Leu Asn Gly Lys Glu Leu
 65 70 75
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 80 85 90
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 95 100 105
 Cys Val Ala Arg Met Pro Ala Gly Ala Val Ala Ser Val Pro Ala
 110 115 120
 Thr Val Thr Leu Ala Asn Leu Gln Asp Phe Lys Leu Asp Val Gln
 125 130 135

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His	Leu	Pro	Glu	Ser	His	Pro	Lys	Ala	Gln	Val	Arg	Tyr	Ser	Val
				155					160					165
Lys	Gln	Glu	Trp	Leu	Glu	Ala	Ser	Arg	Gly	Asn	Tyr	Leu	Ile	Met
				170					175					180
Pro	Ser	Gly	Asn	Leu	Gln	Ile	Val	Asn	Ala	Ser	Gln	Glu	Asp	Glu
				185					190					195
Gly	Met	Tyr	Lys	Cys	Ala	Ala	Tyr	Asn	Pro	Val	Thr	Gln	Glu	Val
				200					205					210
Lys	Thr	Ser	Gly	Ser	Ser	Asp	Arg	Leu	Arg	Val	Arg	Arg	Ser	Thr
				215					220					225
Ala	Glu	Ala	Ala	Arg	Ile	Ile	Tyr	Pro	Pro	Glu	Ala	Gln	Thr	Ile
				230					235					240
Ile	Val	Thr	Lys	Gly	Gln	Ser	Leu	Ile	Leu	Glu	Cys	Val	Ala	Ser
				245					250					255
Gly	Ile	Pro	Pro	Pro	Arg	Val	Thr	Trp	Ala	Lys	Asp	Gly	Ser	Ser
				260					265					270
Val	Thr	Gly	Tyr	Asn	Lys	Thr	Arg	Phe	Leu	Leu	Ser	Asn	Leu	Leu
				275					280					285
Ile	Asp	Thr	Thr	Ser	Glu	Glu	Asp	Ser	Gly	Thr	Tyr	Arg	Cys	Met
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Asn	Val	Gln	Val	Phe	Glu	Pro	Pro	Glu	Val	Thr	Met	Glu	Leu	Ser
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Gln	Leu	Val	Ile	Pro	Trp	Gly	Gln	Ser	Ala	Lys	Leu	Thr	Cys	Glu
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Val	Arg	Gly	Asn	Pro	Pro	Pro	Ser	Val	Leu	Trp	Leu	Arg	Asn	Ala
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Val	Pro	Leu	Ile	Ser	Ser	Gln	Arg	Leu	Arg	Leu	Ser	Arg	Arg	Ala
				365					370					375
Leu	Arg	Val	Leu	Ser	Met	Gly	Pro	Glu	Asp	Glu	Gly	Val	Tyr	Gln
				380					385					390
Cys	Met	Ala	Glu	Asn	Glu	Val	Gly	Ser	Ala	His	Ala	Val	Val	Gln
				395					400					405
Leu	Arg	Thr	Ser	Arg	Pro	Ser	Ile	Thr	Pro	Arg	Leu	Trp	Gln	Asp
				410					415					420
Ala	Glu	Leu	Ala	Thr	Gly	Thr	Pro	Pro	Val	Ser	Pro	Ser	Lys	Leu

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Gly	Asn	Pro	Glu	Gln	Met	Leu	Arg	Gly	Gln	Pro	Ala	Leu	Pro	Arg																	
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Pro	Pro	Thr	Ser	Val	Gly	Pro	Ala	Ser	Pro	Lys	Cys	Pro	Gly	Glu																	
				455					460					465																	
Lys	Gly	Gln	Gly	Ala	Pro	Ala	Glu	Ala	Pro	Ile	Ile	Leu	Ser	Ser																	
				470					475					480																	
Pro	Arg	Thr	Ser	Lys	Thr	Asp	Ser	Tyr	Glu	Leu	Val	Trp	Arg	Pro																	
				485					490					495																	
Arg	His	Glu	Gly	Ser	Gly	Arg	Ala	Pro	Ile	Leu	Tyr	Tyr	Val	Val																	
				500					505					510																	
Lys	His	Arg	Lys	Gln	Val	Thr	Asn	Ser	Ser	Asp	Asp	Trp	Thr	Ile																	
				515					520					525																	
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Asp	Pro	Gly	Ser	Leu	Tyr	Glu	Val	Glu	Met	Ala	Ala	Tyr	Asn	Cys																	
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Ala	Gly	Glu	Gly	Gln	Thr	Ala	Met	Val	Thr	Phe	Arg	Thr	Gly	Arg																	
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Lys	Leu	Lys	Lys	Val	Gly	Asp	Trp	Ile	Leu	Ala	Thr	Ser	Ala	Ile																	
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Thr	Ser	Tyr	Lys	Phe	Arg	Val	Arg	Ala	Leu	Asn	Met	Leu	Gly	Glu																	
				680					685					690																	
Ser	Glu	Pro	Ser	Ala	Pro	Ser	Arg	Pro	Tyr	Val	Val	Ser	Gly	Tyr																	
				695					700					705																	
Ser	Gly	Arg	Val	Tyr	Glu	Arg	Pro	Val	Ala	Gly	Pro	Tyr	Ile	Thr																	
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Arg Ala Pro Asp Ser Pro Val Leu Glu Ala Val Trp Asp Pro Pro		
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Phe His Ser Gly Pro Pro Cys Cys Leu Gly Leu Val Pro Val Glu		
1055	1060	1065
Glu Val Asp Ser Pro Asp Ser Cys Gln Val Ser Gly Gly Asp Trp		
1070	1075	1080
Cys Pro Gln His Pro Val Gly Ala Tyr Val Gly Gln Glu Pro Gly		
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Pro Pro Leu Thr Ile		
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 <212> DNA
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<400> 441
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Gly	Val	Asn	Lys	Asp	Ser	Leu	Met	Pro	Leu	Trp	Trp	Asn	Gly	Ser	110	115	120
Glu	Pro	Leu	Trp	Val	Thr	Leu	Thr	Lys	Ala	Lys	Arg	Lys	Val	Tyr	125	130	135
Met	Tyr	Tyr	Trp	Pro	Gly	Cys	Glu	Val	Glu	Ile	Leu	Gly	Val	Arg	140	145	150
Pro	Thr	Tyr	Cys	Leu	Glu	Tyr	Lys	Asn	Val	Pro	Thr	Asp	Ile	Asn	155	160	165
Phe	Ala	Asn	Ala	Val	Ser	Asp	Ala	Leu	Asp	Ser	Phe	Lys	Ser	Gly	170	175	180
Arg	Ala	Asp	Leu	Ala	Ala	Ile	Tyr	His	Glu	Arg	Ile	Asp	Val	Glu	185	190	195
Gly	His	His	Tyr	Gly	Pro	Ala	Ser	Pro	Gln	Arg	Lys	Asp	Ala	Leu	200	205	210
Lys	Ala	Val	Asp	Thr	Val	Leu	Lys	Tyr	Met	Thr	Lys	Trp	Ile	Gln	215	220	225
Glu	Arg	Gly	Leu	Gln	Asp	Arg	Leu	Asn	Val	Ile	Ile	Phe	Ser	Asp	230	235	240
His	Gly	Met	Thr	Asp	Ile	Phe	Trp	Met	Asp	Lys	Val	Ile	Glu	Leu	245	250	255
Asn	Lys	Tyr	Ile	Ser	Leu	Asn	Asp	Leu	Gln	Gln	Val	Lys	Asp	Arg	260	265	270
Gly	Pro	Val	Val	Ser	Leu	Trp	Pro	Ala	Pro	Gly	Lys	His	Ser	Glu	275	280	285
Ile	Tyr	Asn	Lys	Leu	Ser	Thr	Val	Glu	His	Met	Thr	Val	Tyr	Glu	290	295	300
Lys	Glu	Ala	Ile	Pro	Ser	Arg	Phe	Tyr	Tyr	Lys	Lys	Gly	Lys	Phe	305	310	315
Val	Ser	Pro	Leu	Thr	Leu	Val	Ala	Asp	Glu	Gly	Trp	Phe	Ile	Thr	320	325	330
Glu	Asn	Arg	Glu	Met	Leu	Pro	Phe	Trp	Met	Asn	Ser	Thr	Gly	Arg	335	340	345
Arg	Glu	Gly	Trp	Gln	Arg	Gly	Trp	His	Gly	Tyr	Asp	Asn	Glu	Leu	350	355	360
Met	Asp	Met	Arg	Gly	Ile	Phe	Leu	Ala	Phe	Gly	Pro	Asp	Phe	Lys	365	370	375
Ser	Asn	Phe	Arg	Ala	Ala	Pro	Ile	Arg	Ser	Val	Asp	Val	Tyr	Asn			

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Val Met Cys Asn Val Val Gly Ile Thr Pro Leu Pro Asn Asn Gly			
	395	400	405
Ser Trp Ser Arg Val Met Cys Met Leu Lys Gly Arg Ala Gly Thr			
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Ala Pro Pro Val Trp Pro Ser His Cys Ala Leu Ala Leu Ile Leu			
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Leu Phe Leu Leu Ala			
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<211> 972

<212> DNA

<213> Homo Sapien

<400> 443

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aaaaaaaaaa aaaaaaaaaa aa 972

<210> 444

<211> 135

<212> PRT

<213> Homo Sapien

<400> 444

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Val Pro Gly Gly Gly Arg Ser Lys Arg Asp Pro Asp Leu Tyr Gln
35 40 45

Leu Leu Gln Arg Leu Phe Lys Ser His Ser Ser Leu Glu Gly Leu
50 55 60

Leu Lys Ala Leu Ser Gln Ala Ser Thr Asp Pro Lys Glu Ser Thr
65 70 75

Ser Pro Glu Lys Arg Asp Met His Asp Phe Phe Val Gly Leu Met
80 85 90

Gly Lys Arg Ser Val Gln Pro Glu Gly Lys Thr Gly Pro Phe Leu
95 100 105

Pro Ser Val Arg Val Pro Arg Pro Leu His Pro Asn Gln Leu Gly
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Ser Thr Gly Lys Ser Ser Leu Gly Thr Glu Glu Gln Arg Pro Leu
125 130 135

<210> 445

<211> 446

<212> DNA

<213> Homo Sapien

<400> 445

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 <211> 92
 <212> PRT
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 Phe Tyr Pro Gly Thr Ser Gly Ser Cys Ser Gly Cys Gly Ser Leu
 35 40 45
 Ser Leu Pro Leu Leu Ala Gly Leu Val Ala Ala Asp Ala Val Ala
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 Arg Gly

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 <211> 1047
 <212> DNA
 <213> Homo Sapien

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 gccaccatg acccctccct cagggggcac cccacagtc acggtacccc 150
 acactgctac tcggctgagg aactgcccct cggccaggcc ccccccacacc 200
 tgctggctcg aggtgccaag tgggggcagg ctttgctgt agccctggtg 250
 tccagcctgg aggcagcaag ccacaggggg aggcacgaga ggccctcagc 300
 tacgaccag tgcccgtgct tgcggccgga ggaggtgttg gaggcagaca 350
 cccaccagcg ctccatctca ccctggagat accgtgtgga cacggatgag 400
 gaccgctatc cacagaagct ggcttctgcc gaggctgtg gcagaggctg 450
 tatcgatgca cggacggggc gcgagacagc tgcgctcaac tccgtgcggc 500
 tgctccagag cctgctggtg ctgcgccgcc ggccctgctc ccgcgacggc 550
 tcggggctcc ccacacctgg ggcctttgcc ttccacaccg agttcatcca 600
 cgtccccgct ggctgcacct gcgtgctgcc ccgttcagtg tgaccgccga 650

ggccgtgggg cccctagact ggacacgtgt gctccccaga gggcaccccc 700
 tatttatgtg tatttattgt tatttatatg cctcccccaa cactaccctt 750
 ggggtctggg cattccccgt gtctggagga cagcccccca ctgttctcct 800
 catctccagc ctcagtagtt gggggtagaa ggagctcagc acctcttcca 850
 gcccttaaag ctgcagaaaa ggtgtcacac ggctgectgt accttggtc 900
 cctgtcctgc tcccggcttc ccttacccta tcaactggct caggccccgc 950
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 tatttaagtg tacgtgtatt attaaactga tgaacacatc cccaaaa 1047

<210> 448

<211> 197

<212> PRT

<213> Homo Sapien

<400> 448

Met	Thr	Leu	Leu	Pro	Gly	Leu	Leu	Phe	Leu	Thr	Trp	Leu	His	Thr	1	5	10	15
Cys	Leu	Ala	His	His	Asp	Pro	Ser	Leu	Arg	Gly	His	Pro	His	Ser	20	25	30	
His	Gly	Thr	Pro	His	Cys	Tyr	Ser	Ala	Glu	Glu	Leu	Pro	Leu	Gly	35	40	45	
Gln	Ala	Pro	Pro	His	Leu	Leu	Ala	Arg	Gly	Ala	Lys	Trp	Gly	Gln	50	55	60	
Ala	Leu	Pro	Val	Ala	Leu	Val	Ser	Ser	Leu	Glu	Ala	Ala	Ser	His	65	70	75	
Arg	Gly	Arg	His	Glu	Arg	Pro	Ser	Ala	Thr	Thr	Gln	Cys	Pro	Val	80	85	90	
Leu	Arg	Pro	Glu	Glu	Val	Leu	Glu	Ala	Asp	Thr	His	Gln	Arg	Ser	95	100	105	
Ile	Ser	Pro	Trp	Arg	Tyr	Arg	Val	Asp	Thr	Asp	Glu	Asp	Arg	Tyr	110	115	120	
Pro	Gln	Lys	Leu	Ala	Phe	Ala	Glu	Cys	Leu	Cys	Arg	Gly	Cys	Ile	125	130	135	
Asp	Ala	Arg	Thr	Gly	Arg	Glu	Thr	Ala	Ala	Leu	Asn	Ser	Val	Arg	140	145	150	
Leu	Leu	Gln	Ser	Leu	Leu	Val	Leu	Arg	Arg	Arg	Pro	Cys	Ser	Arg	155	160	165	
Asp	Gly	Ser	Gly	Leu	Pro	Thr	Pro	Gly	Ala	Phe	Ala	Phe	His	Thr	170	175	180	

Glu Phe Ile His Val Pro Val Gly Cys Thr Cys Val Leu Pro Arg
 185 190 195

Ser Val

<210> 449
 <211> 1690
 <212> DNA
 <213> Homo Sapien

<400> 449
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 gccgagctgc gtgctccgcc agataaaatc gcgattattg gagccggaat 150
 tggtaggact tcagcagcct attacctgcg gcagaaattt gggaaagatg 200
 tgaagataga cctgtttgaa agagaagagg tcggggggcgc cctggctacc 250
 atgatggctg aggggcaaga atacgaggca ggagggtctg tcatccatcc 300
 tttaaactct cacatgaaac gttttgtcaa agacctgggt ctctctgctg 350
 ttcaggcctc tggtaggcta ctggggatat ataattggaga gactctggta 400
 tttagaggaga gcaactgggt cataattaac gtgattaaat tagtttggcg 450
 ctatggattt caatccctcc gtatgcacat gtgggtagag gacgtgttag 500
 acaagttcat gaggatctac cgctaccagt ctcatgacta tgccttcagt 550
 agtgctgaaa aattacttca tgctctagga ggagatgact tccttggaat 600
 gcttaatcga acacttcttg aaaccttgca aaaggccggc ttttctgaga 650
 agttcctcaa tgaaatgatt gtcctgtta tgagggtcaa ttatggccaa 700
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 ttctgcaggc atccaaaagc aatcttatat ctggctcagt aatgtacatc 850
 gaggagaaaa caaagaccaa gtacacagga aatccaacaa agatgtatga 900
 agtgggtctac caaattggaa ctgagactcg ttcagacttc tatgacatcg 950
 tcttggtggc cactccgttg aatcgaaaaa tgtcgaatat tacttttctc 1000
 aactttgatc ctccaattga ggaattccat caatattatc aacatatagt 1050
 gacaacttta gttaaggggg aattgaatac atctatcttt agctctagac 1100
 ccatagataa atttggcctt aatacagttt taaccactga taattcagat 1150

ttgttcatta acagtattgg gattgtgccc tctgtgagag aaaaggaaga 1200
 tcttgagcca tcaacagatg gaacatatgt ttggaagatc ttttccaag 1250
 aaactcttac taaagcacia attttaaagc tctttctgtc ctatgattat 1300
 gctgtgaaga agccatggct tgcataatcct cactataagc ccccggagaa 1350
 atgcccctct atcattctcc atgatcgact ttattacctc aatggcatag 1400
 agtgtgcagc aagtgccatg gagatgagtg ccattgcagc ccacaacgct 1450
 gcactccttg cctatcaccg ctggaacggg cacacagaca tgattgatca 1500
 ggatggctta tatgagaaac ttaaaactga actatgaagt gacacactcc 1550
 tttttccctt cctagttcca aatgactatc agtggcaaaa aagaacaaaa 1600
 tctgagcaga gatgattttg aaccagatat ttgcccatta tcattgttta 1650
 ataaaagtaa tccctgctgg tcataggaaa aaaaaaaaaa 1690

<210> 450
 <211> 505
 <212> PRT
 <213> Homo Sapien

<400> 450
 Met Gly Arg Val Val Ala Glu Leu Val Ser Ser Leu Leu Gly Leu
 1 5 10 15
 Trp Leu Leu Leu Cys Ser Cys Gly Cys Pro Glu Gly Ala Glu Leu
 20 25 30
 Arg Ala Pro Pro Asp Lys Ile Ala Ile Ile Gly Ala Gly Ile Gly
 35 40 45
 Gly Thr Ser Ala Ala Tyr Tyr Leu Arg Gln Lys Phe Gly Lys Asp
 50 55 60
 Val Lys Ile Asp Leu Phe Glu Arg Glu Glu Val Gly Gly Arg Leu
 65 70 75
 Ala Thr Met Met Val Gln Gly Gln Glu Tyr Glu Ala Gly Gly Ser
 80 85 90
 Val Ile His Pro Leu Asn Leu His Met Lys Arg Phe Val Lys Asp
 95 100 105
 Leu Gly Leu Ser Ala Val Gln Ala Ser Gly Gly Leu Leu Gly Ile
 110 115 120
 Tyr Asn Gly Glu Thr Leu Val Phe Glu Glu Ser Asn Trp Phe Ile
 125 130 135
 Ile Asn Val Ile Lys Leu Val Trp Arg Tyr Gly Phe Gln Ser Leu
 140 145 150

440	445	450
His Asp Arg Leu Tyr Tyr Leu Asn Gly	Ile Glu Cys Ala Ala Ser	
455	460	465
Ala Met Glu Met Ser Ala Ile Ala Ala	His Asn Ala Ala Leu Leu	
470	475	480
Ala Tyr His Arg Trp Asn Gly His Thr	Asp Met Ile Asp Gln Asp	
485	490	495
Gly Leu Tyr Glu Lys Leu Lys Thr Glu Leu		
500	505	

<210> 451
 <211> 1743
 <212> PRT
 <213> Homo Sapien

<400> 451

Cys Ala Ala Cys Cys Ala Thr Gly Cys Ala Ala Gly Gly Ala Cys	
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Ala Gly Gly Gly Cys Ala Gly Gly Ala Gly Ala Ala Gly Ala Gly	
20 25 30	
Gly Ala Ala Cys Cys Thr Gly Cys Ala Ala Ala Gly Ala Cys Ala	
35 40 45	
Thr Ala Thr Thr Thr Thr Gly Thr Thr Cys Cys Ala Ala Ala Ala	
50 55 60	
Thr Gly Gly Cys Ala Thr Cys Thr Thr Ala Cys Cys Thr Thr Thr	
65 70 75	
Ala Thr Gly Gly Ala Gly Thr Ala Cys Thr Cys Thr Thr Thr Gly	
80 85 90	
Cys Thr Gly Thr Thr Gly Gly Cys Cys Thr Cys Thr Gly Thr Gly	
95 100 105	
Cys Thr Cys Cys Ala Ala Thr Cys Thr Ala Cys Thr Gly Thr Gly	
110 115 120	
Thr Gly Thr Cys Cys Cys Gly Gly Cys Cys Ala Ala Thr Gly	
125 130 135	
Cys Cys Cys Cys Cys Ala Gly Thr Gly Cys Ala Thr Ala Cys Cys	
140 145 150	
Cys Cys Cys Gly Cys Cys Cys Thr Thr Cys Cys Thr Cys Cys Ala	
155 160 165	
Cys Ala Ala Ala Gly Ala Gly Cys Ala Cys Cys Cys Cys Thr Gly	
170 175 180	
Cys Cys Thr Cys Ala Cys Ala Gly Gly Thr Gly Thr Ala Thr Thr	
185 190 195	

Cys Cys Cys Thr	Cys Ala Ala Cys Ala	Cys Cys Gly Ala Cys	Thr
200	205	210	
Thr Thr Gly Cys	Cys Thr Thr Cys Cys	Gly Cys Cys Thr Ala	Thr
215	220	225	
Ala Cys Cys Gly	Cys Ala Gly Gly Cys	Thr Gly Gly Thr Thr	Thr
230	235	240	
Thr Gly Gly Ala	Gly Ala Cys Cys Cys	Cys Gly Ala Gly Thr	Cys
245	250	255	
Ala Gly Ala Ala	Cys Ala Thr Cys Thr	Thr Cys Thr Thr Cys	Thr
260	265	270	
Cys Cys Cys Cys	Thr Gly Thr Gly Ala	Gly Thr Gly Thr Cys	Thr
275	280	285	
Cys Cys Ala Cys	Thr Thr Cys Cys Cys	Thr Gly Gly Cys Cys	Ala
290	295	300	
Thr Gly Cys Thr	Cys Thr Cys Cys Cys	Thr Thr Gly Gly Gly	Gly
305	310	315	
Cys Cys Cys Ala	Cys Thr Cys Ala Gly	Thr Cys Ala Cys Cys	Ala
320	325	330	
Ala Gly Ala Cys	Cys Cys Ala Gly Ala	Thr Thr Cys Thr Cys	Cys
335	340	345	
Ala Gly Gly Gly	Cys Cys Thr Gly Gly	Gly Cys Thr Thr Cys	Ala
350	355	360	
Ala Cys Cys Thr	Cys Ala Cys Ala Cys	Ala Cys Ala Cys Ala	Cys
365	370	375	
Cys Ala Gly Ala	Gly Thr Cys Thr Gly	Cys Cys Ala Thr Cys	Cys
380	385	390	
Ala Cys Cys Ala	Gly Gly Gly Cys Thr	Thr Cys Cys Ala Gly	Cys
395	400	405	
Ala Cys Cys Thr	Gly Gly Thr Thr Cys	Ala Cys Thr Cys Ala	Cys
410	415	420	
Thr Gly Ala Cys	Thr Gly Thr Thr Cys	Cys Cys Ala Gly Cys	Ala
425	430	435	
Ala Ala Gly Ala	Cys Cys Thr Gly Ala	Cys Cys Thr Thr Gly	Ala
440	445	450	
Ala Gly Ala Thr	Gly Gly Gly Ala Ala	Gly Thr Gly Cys Cys	Cys
455	460	465	
Thr Cys Thr Thr	Cys Gly Thr Cys Ala	Ala Gly Ala Ala Gly	Gly
470	475	480	
Ala Gly Cys Thr	Gly Cys Ala Gly Cys	Thr Gly Cys Ala Gly	Gly

				485					490					495	
Cys	Ala	Ala	Ala	Thr 500	Thr	Thr	Thr	Cys	Thr	Thr 505	Gly	Gly	Gly	Cys	Ala 510
Ala	Thr	Gly	Thr	Cys 515	Ala	Ala	Gly	Ala	Gly	Gly 520	Gly	Cys	Thr	Gly	Thr 525
Ala	Thr	Gly	Ala	Ala 530	Gly	Cys	Ala	Gly	Ala	Ala 535	Gly	Thr	Cys	Thr	Thr 540
Thr	Thr	Thr	Cys	Thr 545	Ala	Cys	Ala	Gly	Ala	Thr 550	Thr	Thr	Thr	Cys	Thr 555
Cys	Cys	Ala	Ala	Cys 560	Cys	Cys	Cys	Thr	Cys	Cys 565	Cys	Ala	Thr	Thr	Gly 570
Cys	Cys	Cys	Ala	Gly 575	Gly	Cys	Gly	Ala	Gly	Gly 580	Gly	Ala	Thr	Cys	Ala 585
Ala	Cys	Ala	Gly	Cys 590	Cys	Ala	Thr	Gly	Thr	Gly 595	Gly	Ala	Ala	Ala	Ala 600
Ala	Gly	Ala	Ala	Gly 605	Ala	Cys	Cys	Cys	Ala	Ala 610	Gly	Gly	Gly	Gly	Ala 615
Ala	Gly	Gly	Thr	Thr 620	Gly	Thr	Ala	Gly	Ala	Cys 625	Ala	Thr	Ala	Ala	Ala 630
Thr	Cys	Cys	Ala	Ala 635	Gly	Gly	Cys	Cys	Thr	Thr 640	Gly	Ala	Cys	Cys	Cys 645
Thr	Thr	Cys	Thr	Gly 650	Ala	Cys	Gly	Gly	Cys	Cys 655	Ala	Thr	Gly	Gly	Gly 660
Thr	Thr	Cys	Thr	Gly 665	Gly	Thr	Gly	Ala	Ala	Thr 670	Cys	Ala	Cys	Ala	Ala 675
Thr	Thr	Thr	Thr	Cys 680	Thr	Thr	Thr	Ala	Ala	Ala 685	Gly	Cys	Cys	Cys	Ala 690
Ala	Gly	Thr	Gly	Gly 695	Gly	Ala	Gly	Ala	Ala	Gly 700	Cys	Cys	Cys	Cys	Thr 705
Thr	Thr	Cys	Ala	Cys 710	Cys	Thr	Thr	Gly	Ala	Ala 715	Thr	Ala	Thr	Ala	Ala 720
Cys	Ala	Ala	Gly	Ala 725	Ala	Ala	Gly	Ala	Ala	Cys 730	Thr	Thr	Cys	Cys	Cys 735
Cys	Ala	Thr	Thr	Cys 740	Cys	Thr	Gly	Gly	Thr	Gly 745	Gly	Gly	Gly	Cys	Gly 750
Ala	Gly	Cys	Ala	Gly 755	Gly	Thr	Cys	Ala	Cys	Thr 760	Gly	Thr	Gly	Cys	Cys 765
Ala	Ala	Gly	Thr	Cys 770	Cys	Cys	Cys	Ala	Thr	Gly 775	Ala	Thr	Gly	Cys	Cys 780

Ala	Cys	Cys	Ala	Gly	Ala	Ala	Ala	Gly	Ala	Gly	Cys	Ala	Gly	Thr	785	790	795
Thr	Cys	Gly	Cys	Thr	Thr	Thr	Thr	Gly	Gly	Gly	Gly	Thr	Gly	Gly	800	805	810
Ala	Thr	Ala	Cys	Ala	Gly	Ala	Gly	Cys	Thr	Gly	Ala	Ala	Cys	Thr	815	820	825
Gly	Cys	Thr	Thr	Thr	Gly	Thr	Gly	Cys	Thr	Gly	Cys	Ala	Gly	Ala	830	835	840
Thr	Gly	Gly	Ala	Thr	Thr	Ala	Cys	Ala	Ala	Gly	Gly	Gly	Ala	Gly	845	850	855
Ala	Thr	Gly	Cys	Cys	Gly	Thr	Gly	Gly	Cys	Cys	Thr	Thr	Cys	Thr	860	865	870
Thr	Thr	Gly	Thr	Cys	Cys	Thr	Cys	Cys	Cys	Thr	Ala	Gly	Cys	Ala	875	880	885
Ala	Gly	Gly	Gly	Cys	Ala	Ala	Gly	Ala	Thr	Gly	Ala	Gly	Gly	Cys	890	895	900
Ala	Ala	Cys	Thr	Gly	Gly	Ala	Ala	Cys	Ala	Gly	Gly	Cys	Cys	Thr	905	910	915
Thr	Gly	Thr	Cys	Ala	Gly	Cys	Cys	Ala	Gly	Ala	Ala	Cys	Ala	Cys	920	925	930
Thr	Gly	Ala	Thr	Ala	Ala	Ala	Gly	Thr	Gly	Gly	Ala	Gly	Cys	Cys	935	940	945
Ala	Cys	Thr	Cys	Ala	Cys	Thr	Cys	Cys	Ala	Gly	Ala	Ala	Ala	Ala	950	955	960
Gly	Gly	Thr	Gly	Gly	Ala	Thr	Ala	Gly	Ala	Gly	Gly	Thr	Gly	Thr	965	970	975
Thr	Cys	Ala	Thr	Cys	Cys	Cys	Cys	Ala	Gly	Ala	Thr	Thr	Thr	Thr	980	985	990
Cys	Cys	Ala	Thr	Thr	Thr	Cys	Thr	Gly	Cys	Cys	Thr	Cys	Cys	Thr	995	1000	1005
Ala	Cys	Ala	Ala	Thr	Cys	Thr	Gly	Gly	Ala	Ala	Ala	Cys	Cys	Ala	1010	1015	1020
Thr	Cys	Cys	Thr	Cys	Cys	Cys	Gly	Ala	Ala	Gly	Ala	Thr	Gly	Gly	1025	1030	1035
Gly	Cys	Ala	Thr	Cys	Cys	Ala	Ala	Ala	Ala	Thr	Gly	Cys	Cys	Thr	1040	1045	1050
Thr	Thr	Gly	Ala	Cys	Ala	Ala	Ala	Ala	Ala	Thr	Gly	Cys	Thr	Gly	1055	1060	1065
Ala	Thr	Thr	Thr	Thr	Thr	Cys	Thr	Gly	Gly	Ala	Ala	Thr	Thr	Gly			

1070	1075	1080
Cys Ala Ala Ala Gly Ala Gly Ala Gly Ala Cys Thr Cys Cys Cys		
1085	1090	1095
Thr Gly Cys Ala Gly Gly Thr Thr Thr Cys Thr Ala Ala Ala Gly		
1100	1105	1110
Cys Ala Ala Cys Cys Cys Ala Cys Ala Ala Gly Gly Cys Thr Gly		
1115	1120	1125
Thr Gly Cys Thr Gly Gly Ala Thr Gly Thr Cys Ala Gly Thr Gly		
1130	1135	1140
Ala Ala Gly Ala Gly Gly Gly Cys Ala Cys Thr Gly Ala Gly Gly		
1145	1150	1155
Cys Cys Ala Cys Ala Gly Cys Ala Gly Cys Thr Ala Cys Cys Ala		
1160	1165	1170
Cys Cys Ala Cys Cys Ala Ala Gly Thr Thr Cys Ala Thr Ala Gly		
1175	1180	1185
Thr Cys Cys Gly Ala Thr Cys Gly Ala Ala Gly Gly Ala Thr Gly		
1190	1195	1200
Gly Thr Cys Cys Cys Thr Cys Thr Thr Ala Cys Thr Thr Cys Ala		
1205	1210	1215
Cys Thr Gly Thr Cys Thr Cys Cys Thr Thr Cys Ala Ala Thr Ala		
1220	1225	1230
Gly Gly Ala Cys Cys Thr Thr Cys Cys Thr Gly Ala Thr Gly Ala		
1235	1240	1245
Thr Gly Ala Thr Thr Ala Cys Ala Ala Ala Thr Ala Ala Ala Gly		
1250	1255	1260
Cys Cys Ala Cys Ala Gly Ala Cys Gly Gly Thr Ala Thr Thr Cys		
1265	1270	1275
Thr Cys Thr Thr Thr Cys Thr Ala Gly Gly Gly Ala Ala Ala Gly		
1280	1285	1290
Thr Gly Gly Ala Ala Ala Thr Cys Cys Cys Ala Cys Thr Ala		
1295	1300	1305
Ala Ala Thr Cys Cys Thr Ala Gly Gly Thr Gly Gly Gly Ala Ala		
1310	1315	1320
Ala Thr Gly Gly Cys Cys Thr Gly Thr Thr Ala Ala Cys Thr Gly		
1325	1330	1335
Ala Thr Gly Gly Cys Ala Cys Ala Thr Thr Gly Cys Thr Ala Ala		
1340	1345	1350
Thr Gly Cys Ala Cys Ala Ala Gly Ala Ala Ala Thr Ala Ala Cys		
1355	1360	1365

Ala Ala Ala Cys Cys Ala Cys Ala Thr Cys Cys Cys Thr Cys Thr	1370	1375	1380
Thr Thr Cys Thr Gly Thr Thr Cys Thr Gly Ala Gly Gly Gly Thr	1385	1390	1395
Gly Cys Ala Thr Thr Thr Gly Ala Cys Cys Cys Cys Ala Gly Thr	1400	1405	1410
Gly Gly Ala Gly Cys Thr Gly Gly Ala Thr Thr Cys Gly Cys Thr	1415	1420	1425
Gly Gly Cys Ala Gly Gly Gly Ala Thr Gly Cys Cys Ala Cys Thr	1430	1435	1440
Thr Cys Cys Ala Ala Gly Gly Cys Thr Cys Ala Ala Thr Cys Ala	1445	1450	1455
Cys Cys Ala Ala Ala Cys Cys Ala Thr Cys Ala Ala Cys Ala Gly	1460	1465	1470
Gly Gly Ala Cys Cys Cys Cys Ala Gly Thr Cys Ala Cys Ala Ala	1475	1480	1485
Gly Cys Cys Ala Ala Cys Ala Cys Cys Cys Ala Thr Thr Ala Ala	1490	1495	1500
Cys Cys Cys Cys Ala Gly Thr Cys Ala Gly Thr Gly Cys Cys Cys	1505	1510	1515
Thr Thr Thr Thr Cys Cys Ala Cys Ala Ala Ala Thr Thr Cys Thr	1520	1525	1530
Cys Cys Cys Ala Gly Gly Thr Ala Ala Cys Thr Ala Gly Cys Thr	1535	1540	1545
Thr Cys Ala Thr Gly Gly Gly Ala Thr Gly Thr Thr Gly Cys Thr	1550	1555	1560
Gly Gly Gly Thr Thr Ala Cys Cys Ala Thr Ala Thr Thr Thr Cys	1565	1570	1575
Cys Ala Thr Thr Cys Cys Thr Thr Gly Gly Gly Gly Cys Thr Cys	1580	1585	1590
Cys Cys Ala Gly Gly Ala Ala Thr Gly Gly Ala Ala Ala Thr Ala	1595	1600	1605
Cys Gly Cys Cys Ala Ala Cys Cys Cys Ala Gly Gly Thr Thr Ala	1610	1615	1620
Gly Gly Cys Ala Cys Cys Thr Cys Thr Ala Thr Thr Gly Cys Ala	1625	1630	1635
Gly Ala Ala Thr Thr Ala Cys Ala Ala Thr Ala Ala Cys Ala Cys	1640	1645	1650
Ala Thr Thr Cys Ala Ala Thr Ala Ala Ala Cys Thr Ala Ala			

1655	1660	1665
Ala Ala Thr Ala Thr Gly Ala Ala Thr Thr Cys Ala Ala Ala Ala		
1670	1675	1680
Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala		
1685	1690	1695
Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala		
1700	1705	1710
Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala		
1715	1720	1725
Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala		
1730	1735	1740
Ala Ala Ala		

<210> 452
 <211> 417
 <212> PRT
 <213> Homo Sapien

<400> 452
Met Ala Ser Tyr Leu Tyr Gly Val Leu Phe Ala Val Gly Leu Cys
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Ala Pro Ile Tyr Cys Val Ser Pro Ala Asn Ala Pro Ser Ala Tyr
20 25 30
Pro Arg Pro Ser Ser Thr Lys Ser Thr Pro Ala Ser Gln Val Tyr
35 40 45
Ser Leu Asn Thr Asp Phe Ala Phe Arg Leu Tyr Arg Arg Leu Val
50 55 60
Leu Glu Thr Pro Ser Gln Asn Ile Phe Phe Ser Pro Val Ser Val
65 70 75
Ser Thr Ser Leu Ala Met Leu Ser Leu Gly Ala His Ser Val Thr
80 85 90
Lys Thr Gln Ile Leu Gln Gly Leu Gly Phe Asn Leu Thr His Thr
95 100 105
Pro Glu Ser Ala Ile His Gln Gly Phe Gln His Leu Val His Ser
110 115 120
Leu Thr Val Pro Ser Lys Asp Leu Thr Leu Lys Met Gly Ser Ala
125 130 135
Leu Phe Val Lys Lys Glu Leu Gln Leu Gln Ala Asn Phe Leu Gly
140 145 150
Asn Val Lys Arg Leu Tyr Glu Ala Glu Val Phe Ser Thr Asp Phe
155 160 165

Ser	Asn	Pro	Ser	Ile	Ala	Gln	Ala	Arg	Ile	Asn	Ser	His	Val	Lys
				170					175					180
Lys	Lys	Thr	Gln	Gly	Lys	Val	Val	Asp	Ile	Ile	Gln	Gly	Leu	Asp
				185					190					195
Leu	Leu	Thr	Ala	Met	Val	Leu	Val	Asn	His	Ile	Phe	Phe	Lys	Ala
				200					205					210
Lys	Trp	Glu	Lys	Pro	Phe	His	Leu	Glu	Tyr	Thr	Arg	Lys	Asn	Phe
				215					220					225
Pro	Phe	Leu	Val	Gly	Glu	Gln	Val	Thr	Val	Gln	Val	Pro	Met	Met
				230					235					240
His	Gln	Lys	Glu	Gln	Phe	Ala	Phe	Gly	Val	Asp	Thr	Glu	Leu	Asn
				245					250					255
Cys	Phe	Val	Leu	Gln	Met	Asp	Tyr	Lys	Gly	Asp	Ala	Val	Ala	Phe
				260					265					270
Phe	Val	Leu	Pro	Ser	Lys	Gly	Lys	Met	Arg	Gln	Leu	Glu	Gln	Ala
				275					280					285
Leu	Ser	Ala	Arg	Thr	Leu	Ile	Lys	Trp	Ser	His	Ser	Leu	Gln	Lys
				290					295					300
Arg	Trp	Ile	Glu	Val	Phe	Ile	Pro	Arg	Phe	Ser	Ile	Ser	Ala	Ser
				305					310					315
Tyr	Asn	Leu	Glu	Thr	Ile	Leu	Pro	Lys	Met	Gly	Ile	Gln	Asn	Ala
				320					325					330
Phe	Asp	Lys	Asn	Ala	Asp	Phe	Ser	Gly	Ile	Ala	Lys	Arg	Asp	Ser
				335					340					345
Leu	Gln	Val	Ser	Lys	Ala	Thr	His	Lys	Ala	Val	Leu	Asp	Val	Ser
				350					355					360
Glu	Glu	Gly	Thr	Glu	Ala	Thr	Ala	Ala	Thr	Thr	Thr	Lys	Phe	Ile
				365					370					375
Val	Arg	Ser	Lys	Asp	Gly	Pro	Ser	Tyr	Phe	Thr	Val	Ser	Phe	Asn
				380					385					390
Arg	Thr	Phe	Leu	Met	Met	Ile	Thr	Asn	Lys	Ala	Thr	Asp	Gly	Ile
				395					400					405
Leu	Phe	Leu	Gly	Lys	Val	Glu	Asn	Pro	Thr	Lys	Ser			
				410					415					

<210> 453

<212> DNA

<213> Homo Sapien

<400> 453

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 tgaccctgac tccctccagg tccggaggcg ggggcccccg gggcgactcg 150
 ggggaggacc gcggggcgga gctgccgcc gtgagtccgg ccgagccacc 200
 tgagcccag ccgcgggaca ccgtcgctcc tgcctccga atgctgcga 250
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 cctcgccac cgtgctgct gctcctgctg ctgctgctcc tgctgcagcc 350
 gccgctccg acctggggcg tcagcccccg gatcagcctg cctctgggct 400
 ctgaagagcg gccattcctc agattcgaag ctgaacacat ctccaactac 450
 acagcccttc tgctgagcag ggatggcagg acctgtacg tgggtgctcg 500
 agaggccctc ttgcaactca gtagcaacct cagcttcctg ccaggcgggg 550
 agtaccagga gctgctttgg ggtgcagacg cagagaagaa acagcagtgc 600
 agcttcaagg gcaaggaccc acagcgcgac tgtcaaaact acatcaagat 650
 cctcctgccg ctccagcgga gtcacctgtt cactgtggc acagcagcct 700
 tcagcccat gtgtacctac atcaacatgg agaacttcac cctggcaagg 750
 gacgagaagg ggaatgtcct cctggaagat ggcaagggcc gttgtccctt 800
 cgacccgaat ttcaagtcca ctgccctggt ggttgatggc gagctctaca 850
 ctggaacagt cagcagcttc caagggaatg acccgccat ctccgggagc 900
 caaagccttc gcccaccaa gaccgagagc tccctcaact ggctgcaaga 950
 cccagctttt gtggcctcag cctacattcc tgagagcctg ggcagcttgc 1000
 aaggcgatga tgacaagatc tactttttct tcagcgagac tggccaggaa 1050
 tttgagttct ttgagaacac cattgtgtcc cgcattgcc gcctctgcaa 1100
 gggcgatgag ggtggagagc gggtgctaca gcagcgtgg acctccttc 1150
 tcaaggccca gctgctgtgc tcacggcccg acgatggctt ccccttcaac 1200
 gtgctgcagg atgtcttcac gctgagcccc agccccagg actggcgtga 1250
 cacccttttc tatggggtct tcaattccca gtggcacagg ggaactacag 1300
 aaggctctgc cgtctgtgtc ttcacaatga aggatgtgca gagagtcttc 1350
 agcggcctct acaaggaggt gaaccgtgag acacagcagt ggtacaccgt 1400
 gaccacccg gtgccacac cccggcctgg agcgtgcatc accaacagtg 1450
 cccgggaaag gaagatcaac tcatcctgc agtcccaga ccgcgtgctg 1500

aacttcctca	aggaccactt	cctgatggac	gggcaggtcc	gaagccgcat	1550
gctgctgctg	cagccccagg	ctcgctacca	gcgcgtggct	gtacaccgcg	1600
tccttggcct	gcaccacacc	tacgatgtcc	tcttcctggg	cactggtgac	1650
ggccggctcc	acaaggcagt	gagcgtgggc	ccccgggtgc	acatcattga	1700
ggagctgcag	atctttctcat	cgggacagcc	cgtgcagaat	ctgctcctgg	1750
acaccacag	ggggctgctg	tatgcggcct	cacactcggg	cgtagtccag	1800
gtgcccattg	ccaactgcag	cctgtaccgg	agctgtgggg	actgcctcct	1850
cgccccggac	ccctactgtg	cttggagcgg	ctccagctgc	aagcacgtca	1900
gcctctacca	gcctcagctg	gccaccaggc	cgtggatcca	ggacatcgag	1950
ggagccagcg	ccaaggacct	ttgcagcgcg	tcttcggttg	tgtccccgtc	2000
ttttgtacca	acagggggaga	agccatgtga	gcaagtccag	ttccagccca	2050
acacagtgaa	cactttggcc	tgcccgcctc	tctccaacct	ggcgacccca	2100
ctctggctac	gcaacggggc	ccccgtcaat	gcctcggcct	cctgccacgt	2150
gctaccact	ggggacctgc	tgctgggtgg	cacccaacag	ctgggggagt	2200
tccagtgctg	gtcactagag	gagggcttcc	agcagctggg	agccagctac	2250
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cagtgtaccc	gtcattatca	gcacatcgcg	tgtgagtgca	ccagctgggt	2350
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atgtgcacgc	tcttttgtct	ggccgtgctg	ctcccagttt	tattcttgct	2450
ctaccggcac	cggaacagca	tgaaagtctt	cctgaagcag	ggggaatgtg	2500
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ccactcaacg	gcctagggcc	ccctagcacc	ccgctcgatc	accgagggta	2600
ccagtccttg	tcagacagcc	ccccgggggc	ccgagtcttc	actgagtcag	2650
agaagaggcc	actcagcatc	caagacagct	tcgtggaggt	atccccagtg	2700
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gctcggagag	ggtcaactgg	acctcccctc	cgctctgctc	ttcgtggaac	2850
acgaccgtgg	tgcccggccc	ttgggagcct	tggagccagc	tggcctgctg	2900
ctctccagtc	aagtagcgaa	gtcctacca	cccagacacc	caaacagccg	2950

tggccccaga ggtcctggcc aaatatgggg gcctgcctag gttggtggaa 3000
 cagtgtcct tatgtaaact gagccctttg tttaaaaaac aattccaaat 3050
 gtgaaactag aatgagaggg aagagatagc atggcatgca gcacacacgg 3100
 ctgctccagt tcatggcctc ccaggggtgc tggggatgca tccaaagtgg 3150
 ttgtctgaga cagagttgga aaccctcacc aactggcctc ttcaccttcc 3200
 acattatccc gctgccaccg gctgccctgt ctactgcag attcaggacc 3250
 agcttgggct gcgtgcgttc tgccttgcca gtcagccgag gatgtagttg 3300
 ttgctgccgt cgtcccacca cctcaggac cagagggcta ggttggcact 3350
 gcggccctca ccaggtcctg ggctcggacc caactcctgg acctttccag 3400
 cctgtatcag gctgtggcca cacgagagga cagcgcgagc tcaggagaga 3450
 tttcgtgaca atgtacgct ttccctcaga attcagggaa gagactgtcg 3500
 cctgccttcc tccgttgttg cgtgagaacc cgtgtgcccc tccccaccat 3550
 atccaccctc gctccatctt tgaactcaaa cacgaggaac taactgcacc 3600
 ctggctctct cccagtcctc cagttcacc cccatccctc accttccctc 3650
 actctaaggg atatcaacac tgcccagcac aggggccctg aatttatgtg 3700
 gtttttatac attttttaat aagatgcact ttatgtcatt ttttaataaa 3750
 gtctgaagaa ttactgttta aaaaaaaaaa a 3781

<210> 454
 <211> 837
 <212> PRT
 <213> Homo Sapien

<400> 454
 Met Leu Arg Thr Ala Met Gly Leu Arg Ser Trp Leu Ala Ala Pro
 1 5 10 15
 Trp Gly Ala Leu Pro Pro Arg Pro Pro Leu Leu Leu Leu Leu
 20 25 30
 Leu Leu Leu Leu Leu Gln Pro Pro Pro Pro Thr Trp Ala Leu Ser
 35 40 45
 Pro Arg Ile Ser Leu Pro Leu Gly Ser Glu Glu Arg Pro Phe Leu
 50 55 60
 Arg Phe Glu Ala Glu His Ile Ser Asn Tyr Thr Ala Leu Leu Leu
 65 70 75
 Ser Arg Asp Gly Arg Thr Leu Tyr Val Gly Ala Arg Glu Ala Leu
 80 85 90

Val Pro Thr Pro Arg Pro Gly Ala Cys Ile Thr Asn Ser Ala Arg	380	385	390
395	400	405	
Glu Arg Lys Ile Asn Ser Ser Leu Gln Leu Pro Asp Arg Val Leu	410	415	420
Asn Phe Leu Lys Asp His Phe Leu Met Asp Gly Gln Val Arg Ser	425	430	435
Arg Met Leu Leu Leu Gln Pro Gln Ala Arg Tyr Gln Arg Val Ala	440	445	450
Val His Arg Val Pro Gly Leu His His Thr Tyr Asp Val Leu Phe	455	460	465
Leu Gly Thr Gly Asp Gly Arg Leu His Lys Ala Val Ser Val Gly	470	475	480
Pro Arg Val His Ile Ile Glu Glu Leu Gln Ile Phe Ser Ser Gly	485	490	495
Gln Pro Val Gln Asn Leu Leu Leu Asp Thr His Arg Gly Leu Leu	500	505	510
Tyr Ala Ala Ser His Ser Gly Val Val Gln Val Pro Met Ala Asn	515	520	525
Cys Ser Leu Tyr Arg Ser Cys Gly Asp Cys Leu Leu Ala Arg Asp	530	535	540
Pro Tyr Cys Ala Trp Ser Gly Ser Ser Cys Lys His Val Ser Leu	545	550	555
Tyr Gln Pro Gln Leu Ala Thr Arg Pro Trp Ile Gln Asp Ile Glu	560	565	570
Gly Ala Ser Ala Lys Asp Leu Cys Ser Ala Ser Ser Val Val Ser	575	580	585
Pro Ser Phe Val Pro Thr Gly Glu Lys Pro Cys Glu Gln Val Gln	590	595	600
Phe Gln Pro Asn Thr Val Asn Thr Leu Ala Cys Pro Leu Leu Ser	605	610	615
Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro Val Asn	620	625	630
Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu Leu	635	640	645
Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu	650	655	660
Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val	665	670	675

Glu Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro
680 685 690

Val Ile Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys
695 700 705

Ala Ser Trp Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val
710 715 720

Met Cys Thr Leu Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe
725 730 735

Leu Leu Tyr Arg His Arg Asn Ser Met Lys Val Phe Leu Lys Gln
740 745 750

Gly Glu Cys Ala Ser Val His Pro Lys Thr Cys Pro Val Val Leu
755 760 765

Pro Pro Glu Thr Arg Pro Leu Asn Gly Leu Gly Pro Pro Ser Thr
770 775 780

Pro Leu Asp His Arg Gly Tyr Gln Ser Leu Ser Asp Ser Pro Pro
785 790 795

Gly Ala Arg Val Phe Thr Glu Ser Glu Lys Arg Pro Leu Ser Ile
800 805 810

Gln Asp Ser Phe Val Glu Val Ser Pro Val Cys Pro Arg Pro Arg
815 820 825

Val Arg Leu Gly Ser Glu Ile Arg Asp Ser Val Val
830 835

<210> 455
<211> 1903
<212> DNA
<213> Homo Sapien

<400> 455
taagatgagg gcatccctca cgttcacacc cctggtggca tctgccagcc 50
ctgttctggg gacaaggcgg gctttcgtgg gagccatgct cagcctgccca 100
ggaagccaag ccctacagtg cagaggaaac agaatttcaa cggaagctg 150
gtttgcttca taccattggg atctgctggt aaagctgtta tttgggttta 200
gggactgata ccttgcaagt tacttctgga tcaccatgaa tggccaagat 250
ggtggcagaa cagcgtgtgg accctgagtt agagacaatg caaatgttgg 300
attgggtgta attctttttg aatcccagat ccagtctgta cttgaatatg 350
agcagaagat ctacaagaat gctgacaggg aaccgtgtta agaccagca 400
cccctattcc caggagcttc tggcctgacc atctgcagcc aaagcactaa 450
cagggacaga tatgggaatg tccacctttg atccgcatcc tgcacaatag 500

<210> 456
 <211> 148
 <212> PRT
 <213> Homo Sapien

<400> 456
 Met Gly Thr Trp Trp His Arg Glu Thr Gln Leu Ala Thr Phe Ser
 1 5 10 15
 Ala Thr Leu Leu Thr Gln Leu His Pro Thr Leu Leu Thr Gln Val
 20 25 30
 His Pro Leu Leu Leu Ser Phe Pro Gln Arg Thr Gly Ser Arg Ala
 35 40 45
 Trp Trp Val Phe Ala Thr Leu Gly Ala Ser Ser Ala Ala Pro His
 50 55 60
 Leu Ser Leu Phe Ser Pro Lys Leu Val Phe Leu Thr Ile Ile Val
 65 70 75
 Val Gly Gly Gly Gln Met Leu Lys Val Glu Ala Asp Leu Glu Lys
 80 85 90
 Glu Thr His Gly Val Thr Val Ala Lys Asp Ser Trp Lys Arg Asn
 95 100 105
 Ser Ile Thr Ser Ser Leu Ala Thr Thr Arg His Pro Arg Pro Trp
 110 115 120
 His Ser Gln Arg Leu Cys Ala Glu Pro Ser Leu Ser Thr Ser Ser
 125 130 135
 Gly Pro Ala Ser Cys Ser Glu Val Ser Ala Val Arg Gln
 140 145

<210> 457
 <211> 2388
 <212> DNA
 <213> Homo Sapien

<400> 457
 cccgcgcgcc cctggcactc aatccccgcc atgtgggggc tctgtctcgc 50
 cctggccgcc ttcgcgccgg ccgtcggccc ggctctgggg gcgcccagga 100
 actcgggtgct gggcctcgcg cagcccggga ccaccaaggt cccaggctcg 150
 accccggccc tgcatagcag cccggcacag ccgcccggcg agacagctaa 200
 cgggacctca gaacagcatg tccggattcg agtcatcaag aagaaaaagg 250
 tcattatgaa gaagcggaag aagctaactc taactcgccc caccctactg 300
 gtgactgccg ggccccttgt gacccctact ccagcaggga ccctcgacct 350
 cgctgagaaa caagaaacag gctgtcctcc tttgggtctg gaggccctgc 400

ggagaacaac aaagacgccc tcctcaccta cctggagcag gtgcgcatgg 1900
 gcattgcagg agtggtgagg gacaaggaca cggagcttgg gattgctgac 1950
 gctgtcattg ccgtggatgg gattaaccat gacgtgacca cggcgtgggg 2000
 cggggattat tggcgtctgc tgaccccagg ggactacatg gtgactgcca 2050
 gtgccgaggg ctaccattca gtgacacgga actgtcgggt cacctttgaa 2100
 gagggcccct tcccctgcaa tttcgtgctc accaagactc ccaaacagag 2150
 gctgcgcgag ctgctggcag ctggggccaa ggtgcccccg gaccttcgca 2200
 ggcgcctgga gcggtctagg ggacagaagg attgatacct gcggtttaag 2250
 agccctaggg caggctggac ctgtcaagac ggaaggggga agagtagaga 2300
 gggagggaca aagtgaggaa aagggtctca ttaaagctac cgggcacctt 2350
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2388

<210> 458
 <211> 734
 <212> PRT
 <213> Homo Sapien

<400> 458
 Met Trp Gly Leu Leu Leu Ala Leu Ala Ala Phe Ala Pro Ala Val
 1 5 10 15
 Gly Pro Ala Leu Gly Ala Pro Arg Asn Ser Val Leu Gly Leu Ala
 20 25 30
 Gln Pro Gly Thr Thr Lys Val Pro Gly Ser Thr Pro Ala Leu His
 35 40 45
 Ser Ser Pro Ala Gln Pro Pro Ala Glu Thr Ala Asn Gly Thr Ser
 50 55 60
 Glu Gln His Val Arg Ile Arg Val Ile Lys Lys Lys Lys Val Ile
 65 70 75
 Met Lys Lys Arg Lys Lys Leu Thr Leu Thr Arg Pro Thr Pro Leu
 80 85 90
 Val Thr Ala Gly Pro Leu Val Thr Pro Thr Pro Ala Gly Thr Leu
 95 100 105
 Asp Pro Ala Glu Lys Gln Glu Thr Gly Cys Pro Pro Leu Gly Leu
 110 115 120
 Glu Ser Leu Arg Val Ser Asp Ser Arg Leu Glu Ala Ser Ser Ser
 125 130 135
 Gln Ser Phe Gly Leu Gly Pro His Arg Gly Arg Leu Asn Ile His
 140 145 150

	440		445		450
Gly Lys Val Pro His Ile Val Pro Asn His His Leu Pro Leu Pro	455		460		465
Thr Tyr Tyr Thr Leu Pro Asn Ala Thr Val Ala Pro Glu Thr Arg	470		475		480
Ala Val Ile Lys Trp Met Lys Arg Ile Pro Phe Val Leu Ser Ala	485		490		495
Asn Leu His Gly Gly Glu Leu Val Val Ser Tyr Pro Phe Asp Met	500		505		510
Thr Arg Thr Pro Trp Ala Ala Arg Glu Leu Thr Pro Thr Pro Asp	515		520		525
Asp Ala Val Phe Arg Trp Leu Ser Thr Val Tyr Ala Gly Ser Asn	530		535		540
Leu Ala Met Gln Asp Thr Ser Arg Arg Pro Cys His Ser Gln Asp	545		550		555
Phe Ser Val His Gly Asn Ile Ile Asn Gly Ala Asp Trp His Thr	560		565		570
Val Pro Gly Ser Met Asn Asp Phe Ser Tyr Leu His Thr Asn Cys	575		580		585
Phe Glu Val Thr Val Glu Leu Ser Cys Asp Lys Phe Pro His Glu	590		595		600
Asn Glu Leu Pro Gln Glu Trp Glu Asn Asn Lys Asp Ala Leu Leu	605		610		615
Thr Tyr Leu Glu Gln Val Arg Met Gly Ile Ala Gly Val Val Arg	620		625		630
Asp Lys Asp Thr Glu Leu Gly Ile Ala Asp Ala Val Ile Ala Val	635		640		645
Asp Gly Ile Asn His Asp Val Thr Thr Ala Trp Gly Gly Asp Tyr	650		655		660
Trp Arg Leu Leu Thr Pro Gly Asp Tyr Met Val Thr Ala Ser Ala	665		670		675
Glu Gly Tyr His Ser Val Thr Arg Asn Cys Arg Val Thr Phe Glu	680		685		690
Glu Gly Pro Phe Pro Cys Asn Phe Val Leu Thr Lys Thr Pro Lys	695		700		705
Gln Arg Leu Arg Glu Leu Leu Ala Ala Gly Ala Lys Val Pro Pro	710		715		720
Asp Leu Arg Arg Arg Leu Glu Arg Leu Arg Gly Gln Lys Asp	725		730		

<210> 459
 <211> 537
 <212> DNA
 <213> Homo Sapien

<400> 459
 taaaacagct acaatattcc agggccagtc acttgccatt tctcataaca 50
 gcgtcagaga gaaagaactg actgaaacgt ttgagatgaa gaaagttctc 100
 ctctgatca cagccatctt ggcatggct gttggtttcc cagtctctca 150
 agaccaggaa cgagaaaaaa gaagtatcag tgacagcgat gaattagctt 200
 cagggttttt tgtgttcct taccatatac catttcgccc acttccacca 250
 attccatttc caagatttcc atggtttaga cgtaattttc ctattccaat 300
 acctgaatct gcccctacaa ctccccctcc tagcgaaaag taaacaagaa 350
 ggataagtca cgataaacct ggtcacctga aattgaaatt gagccacttc 400
 cttgaagaat caaaattcct gttaataaaa gaaaaacaaa tgtaattgaa 450
 atagcacaca gcattctcta gtcaatatct ttagtgatct tctttaataa 500
 acatgaaagc aaagattttg gtttcttaat ttccaca 537

<210> 460
 <211> 85
 <212> PRT
 <213> Homo Sapien

<400> 460
 Met Lys Lys Val Leu Leu Leu Ile Thr Ala Ile Leu Ala Val Ala
 1 5 10 15
 Val Gly Phe Pro Val Ser Gln Asp Gln Glu Arg Glu Lys Arg Ser
 20 25 30
 Ile Ser Asp Ser Asp Glu Leu Ala Ser Gly Phe Phe Val Phe Pro
 35 40 45
 Tyr Pro Tyr Pro Phe Arg Pro Leu Pro Pro Ile Pro Phe Pro Arg
 50 55 60
 Phe Pro Trp Phe Arg Arg Asn Phe Pro Ile Pro Ile Pro Glu Ser
 65 70 75
 Ala Pro Thr Thr Pro Leu Pro Ser Glu Lys
 80 85

<210> 461
 <211> 1536
 <212> DNA
 <213> Homo Sapien

<400> 461

agcaggagca ggagagggac aatggaagct gccccgtcca ggttcatggt 50
 cctcttattt ctcttcacgt gtgagctggc tgcagaagtt gctgcagaag 100
 ttgagaaatc ctcatatggt cctgggtgctg cccaggaacc cacgtggctc 150
 acagatgtcc cagctgccat ggaattcatt gctgccactg aggtggctgt 200
 cataggett cttcaggatt tagaaatacc agcagtgcc atactccata 250
 gcatggtgca aaaattccca ggcgtgtcat ttgggatcag cactgattct 300
 gaggttctga cacactacaa catcactggg aacaccatct gcctctttcg 350
 cctggtagac aatgaacaac tgaatttaga ggacgaagac attgaaagca 400
 ttgatgccac caaattgagc cgtttcattg agatcaacag cctccacatg 450
 gtgacagagt acaaccctgt gactgtgatt gggttattca acagcgtaat 500
 tcagattcat ctctctctga taatgaacaa ggctcccca gagtatgaag 550
 agaacatgca cagataccag aaggcagcca agctcttcca ggggaagatt 600
 ctctttattc tgggtggacag tggtagaaa gaaaatggga aggtgatatc 650
 atttttcaaa cttaaaggagt ctcaactgcc agctttggca atttaccaga 700
 ctctagatga cgagtgggat aactgcccc cagcagaagt ttccgtagag 750
 catgtgcaaa acttttgtga tggattccta agtggaaaat tgttgaaaga 800
 aaatcgtgaa tcagaaggaa agactccaaa ggtggaactc tgacttctcc 850
 ttggaactac atatggccaa gtatctactt tatgcaaagt aaaaaggcac 900
 aactcaaatc tcagagacac taaacaacag gatcactagg cctgccaacc 950
 acacacacac gcacgtgcac acacgcacgc acgcgtgcac acacacacgc 1000
 gcacacacac acacacacag agcttcattt cctgtcttaa aatctcgttt 1050
 tctcttcttc cttcttttaa atttcatatc ctactccct atccaatttc 1100
 cttcttatcg tgcattcata ctctgtaagc ccatctgtaa cacacctaga 1150
 tcaaggcttt aagagactca ctgtgatgcc tctatgaaag agaggcattc 1200
 ctagagaaag attgttccaa tttgtcattt aatatcaagt ttgtatactg 1250
 cacatgactt acacacaaca tagttcctgc tcttttaagg ttacctaagg 1300
 gttgaaactc taccttcttt cataagcaca tgtccgtctc tgactcagga 1350
 tcaaaaacca aaggatgggt ttaaacacct ttgtgaaatt gtctttttgc 1400
 cagaagttaa aggtgtctc caagtccttg aactcagcag aaatagacca 1450

tgtgaaaact ccatgcttgg ttagcatctc caactcccta tgtaaataca 1500

caacctgcat aataaataaa aggcaatcat gttata 1536

<210> 462

<211> 273

<212> PRT

<213> Homo Sapien

<400> 462

Met Glu Ala Ala Pro Ser Arg Phe Met Phe Leu Leu Phe Leu Leu
1 5 10 15

Thr Cys Glu Leu Ala Ala Glu Val Ala Ala Glu Val Glu Lys Ser
20 25 30

Ser Asp Gly Pro Gly Ala Ala Gln Glu Pro Thr Trp Leu Thr Asp
35 40 45

Val Pro Ala Ala Met Glu Phe Ile Ala Ala Thr Glu Val Ala Val
50 55 60

Ile Gly Phe Phe Gln Asp Leu Glu Ile Pro Ala Val Pro Ile Leu
65 70 75

His Ser Met Val Gln Lys Phe Pro Gly Val Ser Phe Gly Ile Ser
80 85 90

Thr Asp Ser Glu Val Leu Thr His Tyr Asn Ile Thr Gly Asn Thr
95 100 105

Ile Cys Leu Phe Arg Leu Val Asp Asn Glu Gln Leu Asn Leu Glu
110 115 120

Asp Glu Asp Ile Glu Ser Ile Asp Ala Thr Lys Leu Ser Arg Phe
125 130 135

Ile Glu Ile Asn Ser Leu His Met Val Thr Glu Tyr Asn Pro Val
140 145 150

Thr Val Ile Gly Leu Phe Asn Ser Val Ile Gln Ile His Leu Leu
155 160 165

Leu Ile Met Asn Lys Ala Ser Pro Glu Tyr Glu Glu Asn Met His
170 175 180

Arg Tyr Gln Lys Ala Ala Lys Leu Phe Gln Gly Lys Ile Leu Phe
185 190 195

Ile Leu Val Asp Ser Gly Met Lys Glu Asn Gly Lys Val Ile Ser
200 205 210

Phe Phe Lys Leu Lys Glu Ser Gln Leu Pro Ala Leu Ala Ile Tyr
215 220 225

Gln Thr Leu Asp Asp Glu Trp Asp Thr Leu Pro Thr Ala Glu Val
230 235 240

Ser Val Glu His Val Gln Asn Phe Cys Asp Gly Phe Leu Ser Gly
 245 250 255

Lys Leu Leu Lys Glu Asn Arg Glu Ser Glu Gly Lys Thr Pro Lys
 260 265 270

Val Glu Leu

<210> 463

<211> 764

<212> DNA

<213> Homo Sapien

<400> 463

ctcgcttctt ccttctggat gggggcccag gggggcccagg agagtataaa 50
 ggcgatgtgg aggggtgcccgc gcacaaccag acgcccagtc acaggcgaga 100
 gccctgggat gcaccggcca gaggccatgc tgctgctgct cacgcttgcc 150
 ctctctggggg gcccacactg ggcagggaag atgtatggcc ctggaggagg 200
 caagtatttc agcaccactg aagactacga ccatgaaatc acagggctgc 250
 ggggtgtctgt aggtcttctc ctggtgaaaa gtgtccagggt gaaacttggg 300
 gactcctggg acgtgaaact gggagcctta ggtgggaata cccaggaagt 350
 caccctgcag ccaggcgaat acatcacaaa agtctttgtc gccttccaag 400
 ctttctctccg ggggatggtc atgtacacca gcaaggaccg ctatttctat 450
 tttgggaagc ttgatggcca gatctcctct gcctacccca gccaaagagg 500
 gcagggtgctg gtgggcatct atggccagta tcaactcctt ggcatacaaga 550
 gcattggctt tgaatggaat tatccactag aggagccgac cactgagcca 600
 ccagttaatc tcacatactc agcaaactca cccgtgggtc gctaggggtg 650
 ggtatggggc catccgagct gaggccatct gtgtggtggt ggctgatggt 700
 actggagtaa ctgagtcggg acgctgaatc tgaatccacc aataaataaa 750
 gcttctgcag aaaa 764

<210> 464

<211> 178

<212> PRT

<213> Homo Sapien

<400> 464

Met His Arg Pro Glu Ala Met Leu Leu Leu Leu Thr Leu Ala Leu
 1 5 10 15
 Leu Gly Gly Pro Thr Trp Ala Gly Lys Met Tyr Gly Pro Gly Gly
 20 25 30

Gly Lys Tyr Phe Ser Thr Thr Glu Asp Tyr Asp His Glu Ile Thr
35 40 45

Gly Leu Arg Val Ser Val Gly Leu Leu Leu Val Lys Ser Val Gln
50 55 60

Val Lys Leu Gly Asp Ser Trp Asp Val Lys Leu Gly Ala Leu Gly
65 70 75

Gly Asn Thr Gln Glu Val Thr Leu Gln Pro Gly Glu Tyr Ile Thr
80 85 90

Lys Val Phe Val Ala Phe Gln Ala Phe Leu Arg Gly Met Val Met
95 100 105

Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr Phe Gly Lys Leu Asp Gly
110 115 120

Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu Gly Gln Val Leu Val
125 130 135

Gly Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile Lys Ser Ile Gly
140 145 150

Phe Glu Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr Glu Pro Pro
155 160 165

Val Asn Leu Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
170 175

<210> 465
<211> 3582
<212> DNA
<213> Homo Sapien

<400> 465
cggacgcgtg ggtccggcgg cctgaggctg caccgggcac gggtcggccg 50
caatccagcc tgggcgggagc cggagttgctg agccgctgcc tagaggccga 100
ggagctcaca gctatgggct ggaggccccg gagagctcgg gggaccccgt 150
tgctgctgct gctactactg ctgctgctct ggccagtgcc aggcgcgggg 200
gtgcttcaag gacatatccc tgggcagcca gtcaccccg actgggtcct 250
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cagacatggg gctggtggcc ctggaggctg aaggccagga gctcctgctt 350
gagctggaga agaaccacag gctgctggcc ccaggatata tagaaacca 400
ctacggccca gatgggcagc cagtgggtgct ggcccccaac cacacggatc 450
attgccacta ccaagggcga gtaaggggct tccccgactc ctgggtagtc 500
ctctgcacct gctctgggat gagtggcctg atcaccctca gcaggaatgc 550

agttcaacac tgcagtgagc tatggtggca ccaactgcact ccagcctggg 3500
 tgacagagca agaccctgtc tctaaaataa attttaaaag gacttaaaaa 3550
 aaaaaaaaaa aaaaaaaaaa aaaaaaagaa aa 3582

<210> 466
 <211> 813
 <212> PRT
 <213> Homo Sapien

<400> 466
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 20 25 30
 Leu Gln Gly His Ile Pro Gly Gln Pro Val Thr Pro His Trp Val
 35 40 45
 Leu Asp Gly Gln Pro Trp Arg Thr Val Ser Leu Glu Glu Pro Val
 50 55 60
 Ser Lys Pro Asp Met Gly Leu Val Ala Leu Glu Ala Glu Gly Gln
 65 70 75
 Glu Leu Leu Leu Glu Leu Glu Lys Asn His Arg Leu Leu Ala Pro
 80 85 90
 Gly Tyr Ile Glu Thr His Tyr Gly Pro Asp Gly Gln Pro Val Val
 95 100 105
 Leu Ala Pro Asn His Thr Asp His Cys His Tyr Gln Gly Arg Val
 110 115 120
 Arg Gly Phe Pro Asp Ser Trp Val Val Leu Cys Thr Cys Ser Gly
 125 130 135
 Met Ser Gly Leu Ile Thr Leu Ser Arg Asn Ala Ser Tyr Tyr Leu
 140 145 150
 Arg Pro Trp Pro Pro Arg Gly Ser Lys Asp Phe Ser Thr His Glu
 155 160 165
 Ile Phe Arg Met Glu Gln Leu Leu Thr Trp Lys Gly Thr Cys Gly
 170 175 180
 His Arg Asp Pro Gly Asn Lys Ala Gly Met Thr Ser Leu Pro Gly
 185 190 195
 Gly Pro Gln Ser Arg Gly Arg Arg Glu Ala Arg Arg Thr Arg Lys
 200 205 210
 Tyr Leu Glu Leu Tyr Ile Val Ala Asp His Thr Leu Phe Leu Thr
 215 220 225
 Arg His Arg Asn Leu Asn His Thr Lys Gln Arg Leu Leu Glu Val

	230		235		240
Ala Asn Tyr Val	Asp Gln Leu Leu Arg	Thr Leu Asp Ile Gln Val			
	245		250		255
Ala Leu Thr Gly	Leu Glu Val Trp Thr	Glu Arg Asp Arg Ser Arg			
	260		265		270
Val Thr Gln Asp	Ala Asn Ala Thr Leu	Trp Ala Phe Leu Gln Trp			
	275		280		285
Arg Arg Gly Leu	Trp Ala Gln Arg Pro	His Asp Ser Ala Gln Leu			
	290		295		300
Leu Thr Gly Arg	Ala Phe Gln Gly Ala	Thr Val Gly Leu Ala Pro			
	305		310		315
Val Glu Gly Met	Cys Arg Ala Glu Ser	Ser Gly Gly Val Ser Thr			
	320		325		330
Asp His Ser Glu	Leu Pro Ile Gly Ala	Ala Ala Thr Met Ala His			
	335		340		345
Glu Ile Gly His	Ser Leu Gly Leu Ser	His Asp Pro Asp Gly Cys			
	350		355		360
Cys Val Glu Ala	Ala Ala Glu Ser Gly	Gly Cys Val Met Ala Ala			
	365		370		375
Ala Thr Gly His	Pro Phe Pro Arg Val	Phe Ser Ala Cys Ser Arg			
	380		385		390
Arg Gln Leu Arg	Ala Phe Phe Arg Lys	Gly Gly Gly Ala Cys Leu			
	395		400		405
Ser Asn Ala Pro	Asp Pro Gly Leu Pro	Val Pro Pro Ala Leu Cys			
	410		415		420
Gly Asn Gly Phe	Val Glu Ala Gly Glu	Glu Cys Asp Cys Gly Pro			
	425		430		435
Gly Gln Glu Cys	Arg Asp Leu Cys Cys	Phe Ala His Asn Cys Ser			
	440		445		450
Leu Arg Pro Gly	Ala Gln Cys Ala His	Gly Asp Cys Cys Val Arg			
	455		460		465
Cys Leu Leu Lys	Pro Ala Gly Ala Leu	Cys Arg Gln Ala Met Gly			
	470		475		480
Asp Cys Asp Leu	Pro Glu Phe Cys Thr	Gly Thr Ser Ser His Cys			
	485		490		495
Pro Pro Asp Val	Tyr Leu Leu Asp Gly	Ser Pro Cys Ala Arg Gly			
	500		505		510
Ser Gly Tyr Cys	Trp Asp Gly Ala Cys	Pro Thr Leu Glu Gln Gln			
	515		520		525

Cys	Gln	Gln	Leu	Trp	Gly	Pro	Gly	Ser	His	Pro	Ala	Pro	Glu	Ala		
				530					535					540		
Cys	Phe	Gln	Val	Val	Asn	Ser	Ala	Gly	Asp	Ala	His	Gly	Asn	Cys		
				545					550					555		
Gly	Gln	Asp	Ser	Glu	Gly	His	Phe	Leu	Pro	Cys	Ala	Gly	Arg	Asp		
				560					565					570		
Ala	Leu	Cys	Gly	Lys	Leu	Gln	Cys	Gln	Gly	Gly	Lys	Pro	Ser	Leu		
				575					580					585		
Leu	Ala	Pro	His	Met	Val	Pro	Val	Asp	Ser	Thr	Val	His	Leu	Asp		
				590					595					600		
Gly	Gln	Glu	Val	Thr	Cys	Arg	Gly	Ala	Leu	Ala	Leu	Pro	Ser	Ala		
				605					610					615		
Gln	Leu	Asp	Leu	Leu	Gly	Leu	Gly	Leu	Val	Glu	Pro	Gly	Thr	Gln		
				620					625					630		
Cys	Gly	Pro	Arg	Met	Val	Cys	Gln	Ser	Arg	Arg	Cys	Arg	Lys	Asn		
				635					640					645		
Ala	Phe	Gln	Glu	Leu	Gln	Arg	Cys	Leu	Thr	Ala	Cys	His	Ser	His		
				650					655					660		
Gly	Val	Cys	Asn	Ser	Asn	His	Asn	Cys	His	Cys	Ala	Pro	Gly	Trp		
				665					670					675		
Ala	Pro	Pro	Phe	Cys	Asp	Lys	Pro	Gly	Phe	Gly	Gly	Ser	Met	Asp		
				680					685					690		
Ser	Gly	Pro	Val	Gln	Ala	Glu	Asn	His	Asp	Thr	Phe	Leu	Leu	Ala		
				695					700					705		
Met	Leu	Leu	Ser	Val	Leu	Leu	Pro	Leu	Leu	Pro	Gly	Ala	Gly	Leu		
				710					715					720		
Ala	Trp	Cys	Cys	Tyr	Arg	Leu	Pro	Gly	Ala	His	Leu	Gln	Arg	Cys		
				725					730					735		
Ser	Trp	Gly	Cys	Arg	Arg	Asp	Pro	Ala	Cys	Ser	Gly	Pro	Lys	Asp		
				740					745					750		
Gly	Pro	His	Arg	Asp	His	Pro	Leu	Gly	Gly	Val	His	Pro	Met	Glu		
				755					760					765		
Leu	Gly	Pro	Thr	Ala	Thr	Gly	Gln	Pro	Trp	Pro	Leu	Asp	Pro	Glu		
				770					775					780		
Asn	Ser	His	Glu	Pro	Ser	Ser	His	Pro	Glu	Lys	Pro	Leu	Pro	Ala		
				785					790					795		
Val	Ser	Pro	Asp	Pro	Gln	Ala	Asp	Gln	Val	Gln	Met	Pro	Arg	Ser		
				800					805					810		
Cys	Leu	Trp														

Thr Ser Leu Cys Asn His Asp
95

<210> 469
<211> 1342
<212> DNA
<213> Homo Sapien

<400> 469
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cttctacaac taaaattcct caaacctaaa atcaacagct tttatgcctt 150
tgaagtgaag gatgcaaaag gaagaactgt ttctctggaa aagtataaag 200
gcaaagtttc actagttgta aacgtggcca gtgactgcca actcacagac 250
agaaattact tagggctgaa ggaactgcac aaagagtttg gaccatccca 300
cttcagcgtg ttggcttttc cctgcaatca gtttggagaa tcggagcccc 350
gcccaagcaa ggaagtagaa tcttttgcaa gaaaaaacta cggagtaact 400
ttccccatct tccacaagat taagattcta ggatctgaag gagaacctgc 450
atttagatTT cttgttgatt cttcaaagaa ggaaccaagg tggaattttt 500
ggaagtatct tgtcaaccct gagggctcaag ttgtgaagtt ctggaggcca 550
gaggagccca ttgaagtcac caggcctgac atagcagctc tggttagaca 600
agtgatcata aaaaagaaaag aggatctatg agaatgccat tgcgtttcta 650
atagaacaga gaaatgtctc catgaggggt ttgtctcatt ttaaacattt 700
tttttttgga gacagtgtct cactctgtca cccaggctgg agtgcagtag 750
tgcgtttctca gctcattgca acctctgcct ttttaaacad gctattaaat 800
gtggcaatga aggatTTTT tttaatgtta tcttgctatt aagtggtaat 850
gaatgttccc aggatgagga tgttacccaa agcaaaaatc aagagtagcc 900
aaagaatcaa catgaaatat attaaactact tcctctgacc atactaaaga 950
attcagaata cacagtgacc aatgtgcctc aatatcttat tgttcaactt 1000
gacattttct aggactgtac ttgatgaaaa tgccaacaca ctagaccact 1050
ctttggattc aagagcactg tgtatgactg aaatttctgg aataactgta 1100
aatggttatg ttaatggaat aaaacacaaa tgttgaaaaa tgtaaaatat 1150
atatacatag attcaaatcc ttatatatgt atgcttgttt tgtgtacagg 1200
atTTTgtttt ttctttttta gtacaggttc ctagtgtttt actataactg 1250

tcactatgta tgtaactgac atatataaat agtcatttat aaatgaccgt 1300

attataacat ttgaaaaagt cttcatcaaa aaaaaaaaaa aa 1342

<210> 470

<211> 209

<212> PRT

<213> Homo Sapien

<400> 470

Met	Glu	Pro	Leu	Ala	Ala	Tyr	Pro	Leu	Lys	Cys	Ser	Gly	Pro	Arg
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Ala	Lys	Val	Phe	Ala	Val	Leu	Leu	Ser	Ile	Val	Leu	Cys	Thr	Val
				20					25					30

Thr	Leu	Phe	Leu	Leu	Gln	Leu	Lys	Phe	Leu	Lys	Pro	Lys	Ile	Asn
				35					40					45

Ser	Phe	Tyr	Ala	Phe	Glu	Val	Lys	Asp	Ala	Lys	Gly	Arg	Thr	Val
				50					55					60

Ser	Leu	Glu	Lys	Tyr	Lys	Gly	Lys	Val	Ser	Leu	Val	Val	Asn	Val
				65					70					75

Ala	Ser	Asp	Cys	Gln	Leu	Thr	Asp	Arg	Asn	Tyr	Leu	Gly	Leu	Lys
				80					85					90

Glu	Leu	His	Lys	Glu	Phe	Gly	Pro	Ser	His	Phe	Ser	Val	Leu	Ala
				95					100					105

Phe	Pro	Cys	Asn	Gln	Phe	Gly	Glu	Ser	Glu	Pro	Arg	Pro	Ser	Lys
				110					115					120

Glu	Val	Glu	Ser	Phe	Ala	Arg	Lys	Asn	Tyr	Gly	Val	Thr	Phe	Pro
				125					130					135

Ile	Phe	His	Lys	Ile	Lys	Ile	Leu	Gly	Ser	Glu	Gly	Glu	Pro	Ala
				140					145					150

Phe	Arg	Phe	Leu	Val	Asp	Ser	Ser	Lys	Lys	Glu	Pro	Arg	Trp	Asn
				155					160					165

Phe	Trp	Lys	Tyr	Leu	Val	Asn	Pro	Glu	Gly	Gln	Val	Val	Lys	Phe
				170					175					180

Trp	Arg	Pro	Glu	Glu	Pro	Ile	Glu	Val	Ile	Arg	Pro	Asp	Ile	Ala
				185					190					195

Ala	Leu	Val	Arg	Gln	Val	Ile	Ile	Lys	Lys	Lys	Glu	Asp	Leu	
				200					205					

<210> 471

<211> 2594

<212> DNA

<213> Homo Sapien

<400> 471

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 gccggggcca tccctagaca gaggaaagt cctgcagagc cgaccagccc 200
 tagtggatct ggggcaggca gcggcgctgg ctgtggaatt agatctgttt 250
 tgaaccagtg ggagcgcac gctggggctc ggaagtcacc gtccgcgggc 300
 accgggttgg cgctgcccga gtggaaccga cagtttgca gcctcggtg 350
 caagtggcct ctctccccc cggttggtgt tcagtgtcgg gtgagggtg 400
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 gcagcgacat ttacaaaggc ctccgggtcc taccgagacc gatccgcagc 550
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 ggaaaaagat aaagtgaaga ttcattggaat attgtccaat actcatcggc 1100
 aagctgcaag agtgaatctg tccttcgatt ttccatttta tggccacttc 1150
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 atttcgatcc cagtgtatcc agaaattcaa ctgtcagata ttttgataat 1300
 ggcacagcac ttgtggtcca gtgggaccat gtacatctcc aggataatta 1350
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 tcatctttgg atacaaagaa attcctgtct tggtcacaca gataagttca 1450

Lys	Pro	Gly	Asp	Gln	Ile	Leu	Asp	Trp	Gln	Tyr	Gly	Val	Thr	Gln	
				35					40					45	
Ala	Phe	Pro	His	Thr	Glu	Glu	Glu	Val	Glu	Val	Asp	Ser	His	Ala	
				50					55					60	
Tyr	Ser	His	Arg	Trp	Lys	Arg	Asn	Leu	Asp	Phe	Leu	Lys	Ala	Val	
				65					70					75	
Asp	Thr	Asn	Arg	Ala	Ser	Val	Gly	Gln	Asp	Ser	Pro	Glu	Pro	Arg	
				80					85					90	
Ser	Phe	Thr	Asp	Leu	Leu	Leu	Asp	Asp	Gly	Gln	Asp	Asn	Asn	Thr	
				95					100					105	
Gln	Ile	Glu	Glu	Asp	Thr	Asp	His	Asn	Tyr	Tyr	Ile	Ser	Arg	Ile	
				110					115					120	
Tyr	Gly	Pro	Ser	Asp	Ser	Ala	Ser	Arg	Asp	Leu	Trp	Val	Asn	Ile	
				125					130					135	
Asp	Gln	Met	Glu	Lys	Asp	Lys	Val	Lys	Ile	His	Gly	Ile	Leu	Ser	
				140					145					150	
Asn	Thr	His	Arg	Gln	Ala	Ala	Arg	Val	Asn	Leu	Ser	Phe	Asp	Phe	
				155					160					165	
Pro	Phe	Tyr	Gly	His	Phe	Leu	Arg	Glu	Ile	Thr	Val	Ala	Thr	Gly	
				170					175					180	
Gly	Phe	Ile	Tyr	Thr	Gly	Glu	Val	Val	His	Arg	Met	Leu	Thr	Ala	
				185					190					195	
Thr	Gln	Tyr	Ile	Ala	Pro	Leu	Met	Ala	Asn	Phe	Asp	Pro	Ser	Val	
				200					205					210	
Ser	Arg	Asn	Ser	Thr	Val	Arg	Tyr	Phe	Asp	Asn	Gly	Thr	Ala	Leu	
				215					220					225	
Val	Val	Gln	Trp	Asp	His	Val	His	Leu	Gln	Asp	Asn	Tyr	Asn	Leu	
				230					235					240	
Gly	Ser	Phe	Thr	Phe	Gln	Ala	Thr	Leu	Leu	Met	Asp	Gly	Arg	Ile	
				245					250					255	
Ile	Phe	Gly	Tyr	Lys	Glu	Ile	Pro	Val	Leu	Val	Thr	Gln	Ile	Ser	
				260					265					270	
Ser	Thr	Asn	His	Pro	Val	Lys	Val	Gly	Leu	Ser	Asp	Ala	Phe	Val	
				275					280					285	
Val	Val	His	Arg	Ile	Gln	Gln	Ile	Pro	Asn	Val	Arg	Arg	Arg	Thr	
				290					295					300	
Ile	Tyr	Glu	Tyr	His	Arg	Val	Glu	Leu	Gln	Met	Ser	Lys	Ile	Thr	
				305					310					315	
Asn	Ile	Ser	Ala	Val	Glu	Met	Thr	Pro	Leu	Pro	Thr	Cys	Leu	Gln	

320	325	330
Phe Asn Arg Cys Gly Pro Cys Val Ser Ser Gln Ile Gly Phe Asn		
335	340	345
Cys Ser Trp Cys Ser Lys Leu Gln Arg Cys Ser Ser Gly Phe Asp		
350	355	360
Arg His Arg Gln Asp Trp Val Asp Ser Gly Cys Pro Glu Glu Ser		
365	370	375
Lys Glu Lys Met Cys Glu Asn Thr Glu Pro Val Glu Thr Ser Ser		
380	385	390
Arg Thr Thr Thr Thr Val Gly Ala Thr Thr Thr Gln Phe Arg Val		
395	400	405
Leu Thr Thr Thr Arg Arg Ala Val Thr Ser Gln Phe Pro Thr Ser		
410	415	420
Leu Pro Thr Glu Asp Asp Thr Lys Ile Ala Leu His Leu Lys Asp		
425	430	435
Asn Gly Ala Ser Thr Asp Asp Ser Ala Ala Glu Lys Lys Gly Gly		
440	445	450
Thr Leu His Ala Gly Leu Ile Ile Gly Ile Leu Ile Leu Val Leu		
455	460	465
Ile Val Ala Thr Ala Ile Leu Val Thr Val Tyr Met Tyr His His		
470	475	480
Pro Thr Ser Ala Ala Ser Ile Phe Phe Ile Glu Arg Arg Pro Ser		
485	490	495
Arg Trp Pro Ala Met Lys Phe Arg Arg Gly Ser Gly His Pro Ala		
500	505	510
Tyr Ala Glu Val Glu Pro Val Gly Glu Lys Glu Gly Phe Ile Val		
515	520	525
Ser Glu Gln Cys		

<210> 473
 <211> 2870
 <212> DNA
 <213> Homo Sapien

<400> 473
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 ccatgcaacc ccgcgccttg cgccttaacc aggactgctc cgcgcgcccc 100
 tgagcctcgg gctccggccc ggacctgcag cctcccaggt ggctgggaag 150
 aactctccaa caataaatac atttgataag aaagatggct ttaaaagtgc 200

Leu	Leu	Val	Leu	Leu	Gly	Tyr	Leu	Ser	Cys	Lys	Val	Thr	Cys	Glu			
				20					25					30			
Ser	Gly	Asp	Cys	Arg	Gln	Gln	Glu	Phe	Arg	Asp	Arg	Ser	Gly	Asn			
				35					40					45			
Cys	Val	Pro	Cys	Asn	Gln	Cys	Gly	Pro	Gly	Met	Glu	Leu	Ser	Lys			
				50					55					60			
Glu	Cys	Gly	Phe	Gly	Tyr	Gly	Glu	Asp	Ala	Gln	Cys	Val	Thr	Cys			
				65					70					75			
Arg	Leu	His	Arg	Phe	Lys	Glu	Asp	Trp	Gly	Phe	Gln	Lys	Cys	Lys			
				80					85					90			
Pro	Cys	Leu	Asp	Cys	Ala	Val	Val	Asn	Arg	Phe	Gln	Lys	Ala	Asn			
				95					100					105			
Cys	Ser	Ala	Thr	Ser	Asp	Ala	Ile	Cys	Gly	Asp	Cys	Leu	Pro	Gly			
				110					115					120			
Phe	Tyr	Arg	Lys	Thr	Lys	Leu	Val	Gly	Phe	Gln	Asp	Met	Glu	Cys			
				125					130					135			
Val	Pro	Cys	Gly	Asp	Pro	Pro	Pro	Pro	Tyr	Glu	Pro	His	Cys	Ala			
				140					145					150			
Ser	Lys	Val	Asn	Leu	Val	Lys	Ile	Ala	Ser	Thr	Ala	Ser	Ser	Pro			
				155					160					165			
Arg	Asp	Thr	Ala	Leu	Ala	Ala	Val	Ile	Cys	Ser	Ala	Leu	Ala	Thr			
				170					175					180			
Val	Leu	Leu	Ala	Leu	Leu	Ile	Leu	Cys	Val	Ile	Tyr	Cys	Lys	Arg			
				185					190					195			
Gln	Phe	Met	Glu	Lys	Lys	Pro	Ser	Trp	Ser	Leu	Arg	Ser	Gln	Asp			
				200					205					210			
Ile	Gln	Tyr	Asn	Gly	Ser	Glu	Leu	Ser	Cys	Phe	Asp	Arg	Pro	Gln			
				215					220					225			
Leu	His	Glu	Tyr	Ala	His	Arg	Ala	Cys	Cys	Gln	Cys	Arg	Arg	Asp			
				230					235					240			
Ser	Val	Gln	Thr	Cys	Gly	Pro	Val	Arg	Leu	Leu	Pro	Ser	Met	Cys			
				245					250					255			
Cys	Glu	Glu	Ala	Cys	Ser	Pro	Asn	Pro	Ala	Thr	Leu	Gly	Cys	Gly			
				260					265					270			
Val	His	Ser	Ala	Ala	Ser	Leu	Gln	Ala	Arg	Asn	Ala	Gly	Pro	Ala			
				275					280					285			
Gly	Glu	Met	Val	Pro	Thr	Phe	Phe	Gly	Ser	Leu	Thr	Gln	Ser	Ile			
				290					295					300			
Cys	Gly	Glu	Phe	Ser	Asp	Ala	Trp	Pro	Leu	Met	Gln	Asn	Pro	Met			

	305		310		315
Gly Gly Asp Asn Ile Ser Phe Cys Asp Ser Tyr Pro Glu Leu Thr					
	320		325		330
Gly Glu Asp Ile His Ser Leu Asn Pro Glu Leu Glu Ser Ser Thr					
	335		340		345
Ser Leu Asp Ser Asn Ser Ser Gln Asp Leu Val Gly Gly Ala Val					
	350		355		360
Pro Val Gln Ser His Ser Glu Asn Phe Thr Ala Ala Thr Asp Leu					
	365		370		375
Ser Arg Tyr Asn Asn Thr Leu Val Glu Ser Ala Ser Thr Gln Asp					
	380		385		390
Ala Leu Thr Met Arg Ser Gln Leu Asp Gln Glu Ser Gly Ala Val					
	395		400		405
Ile His Pro Ala Thr Gln Thr Ser Leu Gln Glu Ala					
	410		415		

<210> 475
 <211> 918
 <212> DNA
 <213> Homo Sapien

<400> 475
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 ctgcgctctg cctgacaggg tccaagccc tgcagtgcta cagctttgag 150
 cacacctact ttggcccctt tgacctcagg gccatgaagc tgcccagcat 200
 ctctgtcct catgagtgtc ttgaggctat cctgtctctg gacaccgggt 250
 atcgcgcgcc ggtgaccctg gtgcggaagg gctgctggac cgggcctcct 300
 gcggggccaga cgcaatcgaá cccggacgcg ctgccgccag actactcggg 350
 ggtgcgcggc tgcacaactg acaaatgcaa cggccacctc atgactcatg 400
 acgccctccc caacctgagc caagcacccg acccgccgac gctcagcggc 450
 gccgagtgt acgcctgtat cgggggtccac caggatgact gcgctatcgg 500
 caggtcccga cgagtccagt gtcaccagga ccagaccgcc tgcttcagg 550
 gcagtggcag aatgacagtt ggcaatttct cagtccctgt gtacatcaga 600
 acctgccacc ggccctcctg caccaccgag ggcaccacca gcccctggac 650
 agccatcgac ctccagggct cctgctgtga ggggtacctc tgcaacagga 700
 aatccatgac ccagcccttc accagtgtct cagccaccac cctccccga 750

gcactacagg tcttggccct gctcctccca gtcctcctgc tgggtggggct 800
 ctcagcatag accgcccctc caggatgctg gggacagggc tcacacacct 850
 cattcttgct gcttcagccc ctatcacata gctcactgga aaatgatgtt 900
 aaagtaagaa ttgcaaaa 918

<210> 476

<211> 251

<212> PRT

<213> Homo Sapien

<400> 476

Met	Ala	Met	Gly	Val	Pro	Arg	Val	Ile	Leu	Leu	Cys	Leu	Phe	Gly	1	5	10	15
Ala	Ala	Leu	Cys	Leu	Thr	Gly	Ser	Gln	Ala	Leu	Gln	Cys	Tyr	Ser	20	25	30	
Phe	Glu	His	Thr	Tyr	Phe	Gly	Pro	Phe	Asp	Leu	Arg	Ala	Met	Lys	35	40	45	
Leu	Pro	Ser	Ile	Ser	Cys	Pro	His	Glu	Cys	Phe	Glu	Ala	Ile	Leu	50	55	60	
Ser	Leu	Asp	Thr	Gly	Tyr	Arg	Ala	Pro	Val	Thr	Leu	Val	Arg	Lys	65	70	75	
Gly	Cys	Trp	Thr	Gly	Pro	Pro	Ala	Gly	Gln	Thr	Gln	Ser	Asn	Pro	80	85	90	
Asp	Ala	Leu	Pro	Pro	Asp	Tyr	Ser	Val	Val	Arg	Gly	Cys	Thr	Thr	95	100	105	
Asp	Lys	Cys	Asn	Ala	His	Leu	Met	Thr	His	Asp	Ala	Leu	Pro	Asn	110	115	120	
Leu	Ser	Gln	Ala	Pro	Asp	Pro	Pro	Thr	Leu	Ser	Gly	Ala	Glu	Cys	125	130	135	
Tyr	Ala	Cys	Ile	Gly	Val	His	Gln	Asp	Asp	Cys	Ala	Ile	Gly	Arg	140	145	150	
Ser	Arg	Arg	Val	Gln	Cys	His	Gln	Asp	Gln	Thr	Ala	Cys	Phe	Gln	155	160	165	
Gly	Ser	Gly	Arg	Met	Thr	Val	Gly	Asn	Phe	Ser	Val	Pro	Val	Tyr	170	175	180	
Ile	Arg	Thr	Cys	His	Arg	Pro	Ser	Cys	Thr	Thr	Glu	Gly	Thr	Thr	185	190	195	
Ser	Pro	Trp	Thr	Ala	Ile	Asp	Leu	Gln	Gly	Ser	Cys	Cys	Glu	Gly	200	205	210	
Tyr	Leu	Cys	Asn	Arg	Lys	Ser	Met	Thr	Gln	Pro	Phe	Thr	Ser	Ala	215	220	225	

Ser Ala Thr Thr Pro Pro Arg Ala Leu Gln Val Leu Ala Leu Leu
 230 235 240

Leu Pro Val Leu Leu Leu Val Gly Leu Ser Ala
 245 250

<210> 477

<211> 3288

<212> DNA

<213> Homo Sapien

<400> 477

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 tgcagggttt cctactgctg ttcttttatg ctgggagctg tggctgtaac 150
 caactaggaa ataacgtatg cagcagctat ggctgtcaga gagttgtgct 200
 tcccaagaca aaggcaagtc ctgtttcttt ttcttttttg gggagtgtcc 250
 ttggcagggt ctgggttttg acgttattcg gtgactgagg aaacagagaa 300
 aggatccttt gtggtcaatc tggcaaagga tctgggacta gcagaggggg 350
 agctggctgc aaggggaacc agggtggttt ccgatgataa caaacaatac 400
 ctgctcctgg attcacatac cggaatttg ctcaaaatg agaaactgga 450
 ccgagagaag ctgtgtggcc ctaaagagcc ctgtatgctg tatttccaaa 500
 ttttaatgga tgatcccttt cagatttacc gggctgagct gagagtcagg 550
 gatataaatg atcacgcgcc agtatttcag gacaaagaaa cagtcttaaa 600
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 gaggcgcccc cgcccaggc ccaggccgag gccgacttgc tcaccgtcta 2250
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<210> 478

<211> 800

<212> PRT

<213> Homo Sapien

<400> 478

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Phe	Leu	Phe	Leu	Phe	Trp	Gly	Val	Ser	Leu	Ala	Gly	Ser	Gly	Phe
				20					25				30	
Gly	Arg	Tyr	Ser	Val	Thr	Glu	Glu	Thr	Glu	Lys	Gly	Ser	Phe	Val
				35					40				45	
Val	Asn	Leu	Ala	Lys	Asp	Leu	Gly	Leu	Ala	Glu	Gly	Glu	Leu	Ala
				50					55				60	
Ala	Arg	Gly	Thr	Arg	Val	Val	Ser	Asp	Asp	Asn	Lys	Gln	Tyr	Leu
				65					70				75	
Leu	Leu	Asp	Ser	His	Thr	Gly	Asn	Leu	Leu	Thr	Asn	Glu	Lys	Leu
				80					85				90	
Asp	Arg	Glu	Lys	Leu	Cys	Gly	Pro	Lys	Glu	Pro	Cys	Met	Leu	Tyr
				95					100				105	
Phe	Gln	Ile	Leu	Met	Asp	Asp	Pro	Phe	Gln	Ile	Tyr	Arg	Ala	Glu
				110					115				120	

Leu	Arg	Val	Arg	Asp	Ile	Asn	Asp	His	Ala	Pro	Val	Phe	Gln	Asp	
				125					130					135	
Lys	Glu	Thr	Val	Leu	Lys	Ile	Ser	Glu	Asn	Thr	Ala	Glu	Gly	Thr	
				140					145					150	
Ala	Phe	Arg	Leu	Glu	Arg	Ala	Gln	Asp	Pro	Asp	Gly	Gly	Leu	Asn	
				155					160					165	
Gly	Ile	Gln	Asn	Tyr	Thr	Ile	Ser	Pro	Asn	Ser	Phe	Phe	His	Ile	
				170					175					180	
Asn	Ile	Ser	Gly	Gly	Asp	Glu	Gly	Met	Ile	Tyr	Pro	Glu	Leu	Val	
				185					190					195	
Leu	Asp	Lys	Ala	Leu	Asp	Arg	Glu	Glu	Gln	Gly	Glu	Leu	Ser	Leu	
				200					205					210	
Thr	Leu	Thr	Ala	Leu	Asp	Gly	Gly	Ser	Pro	Ser	Arg	Ser	Gly	Thr	
				215					220					225	
Ser	Thr	Val	Arg	Ile	Val	Val	Leu	Asp	Val	Asn	Asp	Asn	Ala	Pro	
				230					235					240	
Gln	Phe	Ala	Gln	Ala	Leu	Tyr	Glu	Thr	Gln	Ala	Pro	Glu	Asn	Ser	
				245					250					255	
Pro	Ile	Gly	Phe	Leu	Ile	Val	Lys	Val	Trp	Ala	Glu	Asp	Val	Asp	
				260					265					270	
Ser	Gly	Val	Asn	Ala	Glu	Val	Ser	Tyr	Ser	Phe	Phe	Asp	Ala	Ser	
				275					280					285	
Glu	Asn	Ile	Arg	Thr	Thr	Phe	Gln	Ile	Asn	Pro	Phe	Ser	Gly	Glu	
				290					295					300	
Ile	Phe	Leu	Arg	Glu	Leu	Leu	Asp	Tyr	Glu	Leu	Val	Asn	Ser	Tyr	
				305					310					315	
Lys	Ile	Asn	Ile	Gln	Ala	Met	Asp	Gly	Gly	Gly	Leu	Ser	Ala	Arg	
				320					325					330	
Cys	Arg	Val	Leu	Val	Glu	Val	Leu	Asp	Thr	Asn	Asp	Asn	Pro	Pro	
				335					340					345	
Glu	Leu	Ile	Val	Ser	Ser	Phe	Ser	Asn	Ser	Val	Ala	Glu	Asn	Ser	
				350					355					360	
Pro	Glu	Thr	Pro	Leu	Ala	Val	Phe	Lys	Ile	Asn	Asp	Arg	Asp	Ser	
				365					370					375	
Gly	Glu	Asn	Gly	Lys	Met	Val	Cys	Tyr	Ile	Gln	Glu	Asn	Leu	Pro	
				380					385					390	
Phe	Leu	Leu	Lys	Pro	Ser	Val	Glu	Asn	Phe	Tyr	Ile	Leu	Ile	Thr	
				395					400					405	
Glu	Gly	Ala	Leu	Asp	Arg	Glu	Ile	Arg	Ala	Glu	Tyr	Asn	Ile	Thr	

Ser Val Leu Leu Phe Val Ala Val Arg Leu Cys Arg Arg Ser Arg
710 715 720

Ala Ala Ser Val Gly Arg Cys Ser Val Pro Glu Gly Pro Phe Pro
725 730 735

Gly His Leu Val Asp Val Arg Gly Ala Glu Thr Leu Ser Gln Ser
740 745 750

Tyr Gln Tyr Glu Val Cys Leu Thr Gly Gly Pro Gly Thr Ser Glu
755 760 765

Phe Lys Phe Leu Lys Pro Val Ile Ser Asp Ile Gln Ala Gln Gly
770 775 780

Pro Gly Arg Lys Gly Glu Glu Asn Ser Thr Phe Arg Asn Ser Phe
785 790 795

Gly Phe Asn Ile Gln
800

<210> 479
<211> 1470
<212> DNA
<213> Homo Sapien

<400> 479
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ctttgtcatg ggacctgtgc ggttggaat attgcttttc ctttttttgg 150
ccgtgcacga ggcttgggct gggatgttga aggaggagga cgatgacaca 200
gaacgcttgc ccagcaaatg cgaagtgtgt aagctgtga gcacagagct 250
acaggcggaa ctgagtcgca ccggtcgatc tcgagaggtg ctggagctgg 300
ggcaggtgct ggatacaggc aagaggaaga gacacgtgcc ttacagcgtt 350
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ggactatagt gttcacgctg agcgcaaggg ctactgaga tatgccaagg 450
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aaggtggatc tggggatccc tctggagctt tgggatgagc ccagcgtgga 550
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acattgtggg agactggtac ttccaccatc aggagcagcc cctacaaaat 650
tttctctgtg aaggtcatgt gctcccagct gctgaaactg catgtctaca 700
ggaaacttgg actggaaagg agatcacaga tggggaagag aaaacagaag 750
gggaggaaga gcaggaggag gaggaggaag aggaggaaga ggaaggggga 800

Ala Thr Leu Lys	Gly Leu Val Gln Lys	Gly Val Lys Val Asp Leu
125	130	135
Gly Ile Pro Leu	Glu Leu Trp Asp Glu	Pro Ser Val Glu Val Thr
140	145	150
Tyr Leu Lys Lys	Gln Cys Glu Thr Met	Leu Glu Glu Phe Glu Asp
155	160	165
Ile Val Gly Asp	Trp Tyr Phe His His	Gln Glu Gln Pro Leu Gln
170	175	180
Asn Phe Leu Cys	Glu Gly His Val Leu	Pro Ala Ala Glu Thr Ala
185	190	195
Cys Leu Gln Glu	Thr Trp Thr Gly Lys	Glu Ile Thr Asp Gly Glu
200	205	210
Glu Lys Thr Glu	Gly Glu Glu Glu Gln	Glu Glu Glu Glu Glu Glu
215	220	225
Glu Glu Glu Glu	Gly Gly Asp Lys Met	Thr Lys Thr Gly Ser His
230	235	240
Pro Lys Leu Asp	Arg Glu Asp Leu	
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<210> 481
 <211> 1786
 <212> DNA
 <213> Homo Sapien

<400> 481
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 gccgtggtcc tgctttgtgc ctctgacctg ctgctgctgc tgctactgct 150
 accaccgctt gggctctgcg cggccgaagg ctgcggcggg acgcccgcag 200
 agtctacccc acctccccgg aagaagaaga aggatattcg cgattacaat 250
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 aacctcaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 1786

<210> 482

<211> 234

<212> PRT

<213> Homo Sapien

<400> 482

Met	Ala	Ala	Ser	Arg	Trp	Ala	Arg	Lys	Ala	Val	Val	Leu	Leu	Cys
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Ala	Ser	Asp	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Pro	Pro	Pro	Gly
			20					25						30

Ser	Cys	Ala	Ala	Glu	Gly	Ser	Pro	Gly	Thr	Pro	Asp	Glu	Ser	Thr	
				35					40					45	
Pro	Pro	Pro	Arg	Lys	Lys	Lys	Lys	Asp	Ile	Arg	Asp	Tyr	Asn	Asp	
				50					55					60	
Ala	Asp	Met	Ala	Arg	Leu	Leu	Glu	Gln	Trp	Glu	Lys	Asp	Asp	Asp	
				65					70					75	
Ile	Glu	Glu	Gly	Asp	Leu	Pro	Glu	His	Lys	Arg	Pro	Ser	Ala	Pro	
				80					85					90	
Val	Asp	Phe	Ser	Lys	Ile	Asp	Pro	Ser	Lys	Pro	Glu	Ser	Ile	Leu	
				95					100					105	
Lys	Met	Thr	Lys	Lys	Gly	Lys	Thr	Leu	Met	Met	Phe	Val	Thr	Val	
				110					115					120	
Ser	Gly	Ser	Pro	Thr	Glu	Lys	Glu	Thr	Glu	Glu	Ile	Thr	Ser	Leu	
				125					130					135	
Trp	Gln	Gly	Ser	Leu	Phe	Asn	Ala	Asn	Tyr	Asp	Val	Gln	Arg	Phe	
				140					145					150	
Ile	Val	Gly	Ser	Asp	Arg	Ala	Ile	Phe	Met	Leu	Arg	Asp	Gly	Ser	
				155					160					165	
Tyr	Ala	Trp	Glu	Ile	Lys	Asp	Phe	Leu	Val	Gly	Gln	Asp	Arg	Cys	
				170					175					180	
Ala	Asp	Val	Thr	Leu	Glu	Gly	Gln	Val	Tyr	Pro	Gly	Lys	Gly	Gly	
				185					190					195	
Gly	Ser	Lys	Glu	Lys	Asn	Lys	Thr	Lys	Gln	Asp	Lys	Gly	Lys	Lys	
				200					205					210	
Lys	Lys	Glu	Gly	Asp	Leu	Lys	Ser	Arg	Ser	Ser	Lys	Glu	Glu	Asn	
				215					220					225	
Arg	Ala	Gly	Asn	Lys	Arg	Glu	Asp	Leu							
				230											

<210> 483
 <211> 2379
 <212> DNA .
 <213> Homo Sapien

<400> 483
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 gctgctcctg ccagcccttc tgagctcagg ttggggggag ttggagccac 150
 aaatagatgg tcagacctgg gctgagcggg cacttcggga gaatgaacgc 200
 cagccttca cctgcgggtt ggcagggggg cctggcaccc ccagattggc 250

ctggtatctg gatggacagc tgcaggaggg cagcacctca agactgctga 300
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 gcccatcggg ccagcatga gctcaactgc tctctgcagg accccagaag 400
 tggccgatca gccaacgcct ctgtcatcct taatgtgcaa ttcaagccag 450
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 ctggttgtcc tgtttgccct ggtgcgtgcc aaccgcgcgg ccaatgtcac 550
 ctggatcgac caggatgggc cagtgactgt caacacctct gacttcctgg 600
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 cagctccgca gcctggcaca caacctctcg gtggtggcca ccaatgacgt 700
 ggggtgtcacc agtgcgtcgc ttccagcccc agggccctcc cggcacccat 750
 ctctgatatc aagtgactcc aacaacctaa aactcaacaa cgtgcgcctg 800
 ccacgggaga acatgtccct ccggtccaac cttcagctca atgacctcac 850
 tccagattcc agagcagtga aaccagcaga ccggcagatg gctcagaaca 900
 acagccggcc agagcttctg gacccggagc ccggcggcct cctcaccagc 950
 caaggtttca tccgcctccc agtgctgggc tatatctatc gagtgtccag 1000
 cgtgagcagt gatgagatct ggctctgagc cgagggcgag acaggagtat 1050
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 tcctggctgg ggtgccctcc atgtcatgca cgtgatgcat ttcactgggc 1200
 tgtaaccgcg aggggcacag gtatctttgg caaggctacc agttggacgt 1250
 aagccctca tgctgactca gggtagggcc tgcattgatg gactggggcc 1300
 ttccagaggg agctctttgg ccagggtgtg tcagatgtca tccagcatcc 1350
 aagtgtggca tggcctgctg tataccccac ccagtactc cacagcacct 1400
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 atttaggacc ctgctagctg tgcagaacct aattgccctt tgcacagaaa 1550
 ccaaccctg acccagcggg accggccaag cacaaacgtc ctttttgcgt 1600
 cacacgtctc tgcccttcac ttcttctctt ctgtccccac ctcctcttgg 1650
 gaattctagg ttacacgttg gaccttctct actacttcac tgggcaactag 1700

acttttctat tggcctgtgc catcgcccag tattagcaca agttagggag 1750
 gaagaggcag gcgatgagtc tagtagcacc caggacggct tgtagctatg 1800
 catcattttc ctacggcggtt agcactttta gcacatcccc taggggaggg 1850
 ggtgagtgag gggcccagag ccctctttgt ggcttccccca cgtttggcct 1900
 tctgggattc actgtgagtg tcttgagctc tcgggggttga tggtttttct 1950
 ctcagcatgt ctctccacc acgggacccc agccctgacc aacctatggt 2000
 tgccatcatca gcaggaaggt gcccttcctg gaggatggtc gccacaggca 2050
 cataattcaa cagtgtggaa gcttttagggg aacatggaga aagaaggaga 2100
 ccacataccc caaagtgacc taagaacact ttaaaaagca acatgtaaat 2150
 gattggaaat taatatagta cagaatatat ttttcccttg ttgagatctt 2200
 cttttgtaat gtttttcatg ttactgccta gggcgggtgct gagcacacag 2250
 caagtttaat aaacttgact gaattcattt aaaaaaaaaa aaaaaaaaaa 2300
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2350
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2379

<210> 484
 <211> 322
 <212> PRT
 <213> Homo Sapien

<400> 484
 Met Ala Leu Pro Pro Gly Pro Ala Ala Leu Arg His Thr Leu Leu
 1 5 10 15
 Leu Leu Pro Ala Leu Leu Ser Ser Gly Trp Gly Glu Leu Glu Pro
 20 25 30
 Gln Ile Asp Gly Gln Thr Trp Ala Glu Arg Ala Leu Arg Glu Asn
 35 40 45
 Glu Arg His Ala Phe Thr Cys Arg Val Ala Gly Gly Pro Gly Thr
 50 55 60
 Pro Arg Leu Ala Trp Tyr Leu Asp Gly Gln Leu Gln Glu Ala Ser
 65 70 75
 Thr Ser Arg Leu Leu Ser Val Gly Gly Glu Ala Phe Ser Gly Gly
 80 85 90
 Thr Ser Thr Phe Thr Val Thr Ala His Arg Ala Gln His Glu Leu
 95 100 105
 Asn Cys Ser Leu Gln Asp Pro Arg Ser Gly Arg Ser Ala Asn Ala
 110 115 120

Ser Val Ile Leu Asn Val Gln Phe Lys Pro Glu Ile Ala Gln Val	125	130	135
Gly Ala Lys Tyr Gln Glu Ala Gln Gly Pro Gly Leu Leu Val Val	140	145	150
Leu Phe Ala Leu Val Arg Ala Asn Pro Pro Ala Asn Val Thr Trp	155	160	165
Ile Asp Gln Asp Gly Pro Val Thr Val Asn Thr Ser Asp Phe Leu	170	175	180
Val Leu Asp Ala Gln Asn Tyr Pro Trp Leu Thr Asn His Thr Val	185	190	195
Gln Leu Gln Leu Arg Ser Leu Ala His Asn Leu Ser Val Val Ala	200	205	210
Thr Asn Asp Val Gly Val Thr Ser Ala Ser Leu Pro Ala Pro Gly	215	220	225
Pro Ser Arg His Pro Ser Leu Ile Ser Ser Asp Ser Asn Asn Leu	230	235	240
Lys Leu Asn Asn Val Arg Leu Pro Arg Glu Asn Met Ser Leu Pro	245	250	255
Ser Asn Leu Gln Leu Asn Asp Leu Thr Pro Asp Ser Arg Ala Val	260	265	270
Lys Pro Ala Asp Arg Gln Met Ala Gln Asn Asn Ser Arg Pro Glu	275	280	285
Leu Leu Asp Pro Glu Pro Gly Gly Leu Leu Thr Ser Gln Gly Phe	290	295	300
Ile Arg Leu Pro Val Leu Gly Tyr Ile Tyr Arg Val Ser Ser Val	305	310	315
Ser Ser Asp Glu Ile Trp Leu	320		

<210> 485
 <211> 539
 <212> DNA
 <213> Homo Sapien

<400> 485
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 tcgagttaga attgggtcatt ttattttcag tgtttcacag aaatcgaaga 100
 agacagaaat ggcgcttctg tgggtggatat ctacagtagc aatactgttg 150
 tttacttcga cgattttggg aacatacgtt gaagctggtg ccgctaagtc 200
 taacgaagaa gagattgtga acaaaagcga atttggaaga tttccacgag 250

ggtcgagaaa ggatgcatcg ggggtgccaca agccgggcta ccctgtaccc 300
 cctcattctc gctgccctcc acctcccat gtgcagcgtc ctgcctctat 350
 tctgcatgct tagtctaaca ccatcaggct cgtttatctt ttctgtcatt 400
 gatctcacca ggagcaaatc actagtgcgt gcttctgatt cacgtaacgt 450
 agtatgtaaa taaatgtcag tgatattatg aattggtaaa acatttctgt 500
 tatctaaata aaacagtga gtttgtttga ctaaaaaaa 539

<210> 486
 <211> 84
 <212> PRT
 <213> Homo Sapien

<400> 486
 Met Ala Leu Leu Trp Trp Ile Ser Thr Val Ala Ile Leu Leu Phe
 1 5 10 15
 Thr Ser Thr Ile Leu Gly Thr Tyr Val Glu Ala Gly Ala Ala Lys
 20 25 30
 Ser Asn Glu Glu Glu Ile Val Asn Lys Ser Glu Phe Gly Arg Phe
 35 40 45
 Pro Arg Gly Ser Arg Lys Asp Ala Ser Gly Cys His Lys Pro Gly
 50 55 60
 Tyr Pro Val Pro Pro His Ser Arg Cys Pro Pro Pro Pro His Val
 65 70 75
 Gln Arg Pro Arg Pro Ile Leu His Ala
 80

<210> 487
 <211> 843
 <212> DNA
 <213> Homo Sapien

<400> 487
 cggggacgga agcggccct gggccgagg ggctggagcc gggccggggc 50
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 tgctgctggc gctgttagtg ccgggcggtg gtgccgcaa gaccggtgcg 150
 gagctcgtga cctgcgggtc ggtgctgaag ctgctcaata cgcaccaccg 200
 cgtgcggctg cactcgcacg acatcaaata cggatccggc agcggccagc 250
 aatcgggtgac cggcgtagag gcgtcggacg acgccaatag ctactggcgg 300
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 cgggcaggcg gtgaggctca cgcatgtgct tacgggcaag aacctgcaca 400

cgcaccactt cccgtcgccg ctgtccaaca accaggaggt gagtgccttt 450
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 tggacagcac tgggagcgtg aggctgctgt gcgcttccag catgtgggca 550
 cctctgtgtt cctgtcagtc acgggtgagc agtatggaag ccccatccgt 600
 gggcagcatg aggtccacgg catgcccagt gccaacacgc acaatacgtg 650
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 gtcacgatga actctgagtg tgtggatgga tgggtggatg gaggggtggca 750
 ggtggggcgt ctgcagggcc actcttggca gagactttgg gtttgtaggg 800
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<210> 488

<211> 221

<212> PRT

<213> Homo Sapien

<400> 488

Met	Trp	Ser	Ala	Gly	Arg	Gly	Gly	Ala	Ala	Trp	Pro	Val	Leu	Leu	1	5	10	15
Gly	Leu	Leu	Leu	Ala	Leu	Leu	Val	Pro	Gly	Gly	Gly	Ala	Ala	Lys	20	25	30	
Thr	Gly	Ala	Glu	Leu	Val	Thr	Cys	Gly	Ser	Val	Leu	Lys	Leu	Leu	35	40	45	
Asn	Thr	His	His	Arg	Val	Arg	Leu	His	Ser	His	Asp	Ile	Lys	Tyr	50	55	60	
Gly	Ser	Gly	Ser	Gly	Gln	Gln	Ser	Val	Thr	Gly	Val	Glu	Ala	Ser	65	70	75	
Asp	Asp	Ala	Asn	Ser	Tyr	Trp	Arg	Ile	Arg	Gly	Gly	Ser	Glu	Gly	80	85	90	
Gly	Cys	Pro	Arg	Gly	Ser	Pro	Val	Arg	Cys	Gly	Gln	Ala	Val	Arg	95	100	105	
Leu	Thr	His	Val	Leu	Thr	Gly	Lys	Asn	Leu	His	Thr	His	His	Phe	110	115	120	
Pro	Ser	Pro	Leu	Ser	Asn	Asn	Gln	Glu	Val	Ser	Ala	Phe	Gly	Glu	125	130	135	
Asp	Gly	Glu	Gly	Asp	Asp	Leu	Asp	Leu	Trp	Thr	Val	Arg	Cys	Ser	140	145	150	
Gly	Gln	His	Trp	Glu	Arg	Glu	Ala	Ala	Val	Arg	Phe	Gln	His	Val	155	160	165	
Gly	Thr	Ser	Val	Phe	Leu	Ser	Val	Thr	Gly	Glu	Gln	Tyr	Gly	Ser				

170	175	180
Pro Ile Arg Gly Gln His Glu Val His Gly Met Pro Ser Ala Asn		
185	190	195
Thr His Asn Thr Trp Lys Ala Met Glu Gly Ile Phe Ile Lys Pro		
200	205	210
Ser Val Glu Pro Ser Ala Gly His Asp Glu Leu		
215	220	

<210> 489
 <211> 3322
 <212> DNA
 <213> Homo Sapien

<400> 489
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 cttttcctgt gcctgtgcct tctgactttg cagaatgcaa caacagagac 150
 atgggaagaa ctctgagct acatggagaa tatgcaggtg tccaggggcc 200
 ggagctcagt tttttcctct cgtcaactcc accagctgga gcagatgcta 250
 ctgaacacca gcttcccagg ctacaactg accttgaga caccaccat 300
 ccagtctctg gccttcaagc tgagctgtga cttctctggc ctctcgtga 350
 ccagtgccac tctgaagcgg gtgccccagg caggaggtca gcatgcccgg 400
 ggtcagcacg ccatgcagtt ccccgccgag ctgaccggg acgcctgcaa 450
 gacccgcccc agggagctgc ggctcatctg tatctacttc tccaacaccc 500
 actttttcaa ggatgaaaac aactcatctc tgctgaataa ctacgtcctg 550
 ggggcccagc tgagtcatgg gcacgtgaac aacctcaggg atcctgtgaa 600
 catcagcttc tggcacaacc aaagcctgga aggctacacc ctgacctgtg 650
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 caaccacctc acctactttg ctgttctcat gcaactctcc ccagccctgg 800
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 agcatctcca tcgtggctc gctgatcaca gtctgctgc acttccattt 900
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 acagctggga gaatggcaca ggcttcaga acatgtccat atgctgggtg 1300
 cggagccccg tgggtgcacag tgcctgggtc atgggctacg gcggcctcac 1350
 gtccctcttc aacctgggtg tgctggcctg ggcgctgtgg accctgcgca 1400
 ggctgcggga gcgggcggat gcaccaagtg tcagggcctg ccatgacact 1450
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 ccaatgccag ctctgccact tgctagctgt gagactgtgg acaaaccact 3200
 cagcctctgt gtgcctcagt tttcctattt gtaaaataga gaccatagtg 3250
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 cagagtaagt gctcagtaaa aa 3322

<210> 490

<211> 528

<212> PRT

<213> Homo Sapien

<400> 490

Met	Asp	His	Cys	Gly	Ala	Leu	Phe	Leu	Cys	Leu	Cys	Leu	Leu	Thr
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Leu	Gln	Asn	Ala	Thr	Thr	Glu	Thr	Trp	Glu	Glu	Leu	Leu	Ser	Tyr
				20					25					30
Met	Glu	Asn	Met	Gln	Val	Ser	Arg	Gly	Arg	Ser	Ser	Val	Phe	Ser
				35					40					45
Ser	Arg	Gln	Leu	His	Gln	Leu	Glu	Gln	Met	Leu	Leu	Asn	Thr	Ser
				50					55					60
Phe	Pro	Gly	Tyr	Asn	Leu	Thr	Leu	Gln	Thr	Pro	Thr	Ile	Gln	Ser
				65					70					75
Leu	Ala	Phe	Lys	Leu	Ser	Cys	Asp	Phe	Ser	Gly	Leu	Ser	Leu	Thr
				80					85					90

Ser	Ala	Thr	Leu	Lys 95	Arg	Val	Pro	Gln	Ala 100	Gly	Gly	Gln	His	Ala 105
Arg	Gly	Gln	His	Ala 110	Met	Gln	Phe	Pro	Ala 115	Glu	Leu	Thr	Arg	Asp 120
Ala	Cys	Lys	Thr	Arg 125	Pro	Arg	Glu	Leu	Arg 130	Leu	Ile	Cys	Ile	Tyr 135
Phe	Ser	Asn	Thr	His 140	Phe	Phe	Lys	Asp	Glu 145	Asn	Asn	Ser	Ser	Leu 150
Leu	Asn	Asn	Tyr	Val 155	Leu	Gly	Ala	Gln	Leu 160	Ser	His	Gly	His	Val 165
Asn	Asn	Leu	Arg	Asp 170	Pro	Val	Asn	Ile	Ser 175	Phe	Trp	His	Asn	Gln 180
Ser	Leu	Glu	Gly	Tyr 185	Thr	Leu	Thr	Cys	Val 190	Phe	Trp	Lys	Glu	Gly 195
Ala	Arg	Lys	Gln	Pro 200	Trp	Gly	Gly	Trp	Ser 205	Pro	Glu	Gly	Cys	Arg 210
Thr	Glu	Gln	Pro	Ser 215	His	Ser	Gln	Val	Leu 220	Cys	Arg	Cys	Asn	His 225
Leu	Thr	Tyr	Phe	Ala 230	Val	Leu	Met	Gln	Leu 235	Ser	Pro	Ala	Leu	Val 240
Pro	Ala	Glu	Leu	Leu 245	Ala	Pro	Leu	Thr	Tyr 250	Ile	Ser	Leu	Val	Gly 255
Cys	Ser	Ile	Ser	Ile 260	Val	Ala	Ser	Leu	Ile 265	Thr	Val	Leu	Leu	His 270
Phe	His	Phe	Arg	Lys 275	Gln	Ser	Asp	Ser	Leu 280	Thr	Arg	Ile	His	Met 285
Asn	Leu	His	Ala	Ser 290	Val	Leu	Leu	Leu	Asn 295	Ile	Ala	Phe	Leu	Leu 300
Ser	Pro	Ala	Phe	Ala 305	Met	Ser	Pro	Val	Pro 310	Gly	Ser	Ala	Cys	Thr 315
Ala	Leu	Ala	Ala	Ala 320	Leu	His	Tyr	Ala	Leu 325	Leu	Ser	Cys	Leu	Thr 330
Trp	Met	Ala	Ile	Glu 335	Gly	Phe	Asn	Leu	Tyr 340	Leu	Leu	Leu	Gly	Arg 345
Val	Tyr	Asn	Ile	Tyr 350	Ile	Arg	Arg	Tyr	Val 355	Phe	Lys	Leu	Gly	Val 360
Leu	Gly	Trp	Gly	Ala 365	Pro	Ala	Leu	Leu	Val 370	Leu	Leu	Ser	Leu	Ser 375
Val	Lys	Ser	Ser	Val	Tyr	Gly	Pro	Cys	Thr	Ile	Pro	Val	Phe	Asn

Ser Trp Glu Asn Gly Thr Gly Phe Gln Asn Met Ser Ile Cys Trp
395 400 405

Val Arg Ser Pro Val Val His Ser Val Leu Val Met Gly Tyr Gly
410 415 420

Gly Leu Thr Ser Leu Phe Asn Leu Val Val Leu Ala Trp Ala Leu
425 430 435

Trp Thr Leu Arg Arg Leu Arg Glu Arg Ala Asp Ala Pro Ser Val
440 445 450

Arg Ala Cys His Asp Thr Val Thr Val Leu Gly Leu Thr Val Leu
455 460 465

Leu Gly Thr Thr Trp Ala Leu Ala Phe Phe Ser Phe Gly Val Phe
470 475 480

Leu Leu Pro Gln Leu Phe Leu Phe Thr Ile Leu Asn Ser Leu Tyr
485 490 495

Gly Phe Phe Leu Phe Leu Trp Phe Cys Ser Gln Arg Cys Arg Ser
500 505 510

Glu Ala Glu Ala Lys Ala Gln Ile Glu Ala Phe Ser Ser Ser Gln
515 520 525

Thr Thr Gln

<210> 491
<211> 1305
<212> DNA
<213> Homo Sapien

<400> 491
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gcttttgtgt gtaatatatg ggagattttc ccaagatgaa tactccctca 200
atcaagctat ccggaaagaa ttacaagaa atgccagaaa ctgcttgggg 250
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agcctggagc tcttgaggga aaatgctacc taataggcag ttccgtaatt 400
aggcagctaa aagtttttcc taggcattta tgcaagcctc ccaggccatt 450
ttcagcactc atcgaagact ctattcctac atgtagtccc gaagttggag 500

Pro	Gly	Ala	Leu	Gly	Gly	Lys	Cys	Tyr	Leu	Ile	Gly	Ser	Ser	Val	
				95					100					105	
Ile	Arg	Gln	Leu	Lys	Val	Phe	Pro	Arg	His	Leu	Cys	Lys	Pro	Pro	
				110					115					120	
Arg	Pro	Phe	Ser	Ala	Leu	Ile	Glu	Asp	Ser	Ile	Pro	Thr	Cys	Ser	
				125					130					135	
Pro	Glu	Val	Gly	Gly	Pro	Glu	Asn	Pro	Tyr	Leu	Ile	Asp	Pro	Glu	
				140					145					150	
Asn	Gln	Asn	Val	Thr	Leu	Asn	Gly	Pro	Gly	Gly	Cys	Gly	Thr	Arg	
				155					160					165	
Glu	Asp	Cys	Val	Leu	Ser	Leu	Gly	Arg	Thr	Arg	Thr	Glu	Ala	His	
				170					175					180	
Thr	Ala	Leu	Ser	Arg	Leu	Arg	Ala	Ser	Met	Trp	Ile	Asp	Arg	Ser	
				185					190					195	
Thr	Arg	Ala	Val	Ser	Val	His	Phe	Thr	Leu	Tyr	Asn	Pro	Pro	Thr	
				200					205					210	
Gln	Leu	Phe	Thr	Ser	Val	Ser	Leu	Arg	Val	Glu	Ile	Leu	Pro	Thr	
				215					220					225	
Gly	Ser	Leu	Val	Pro	Ser	Ser	Leu	Val	Glu	Ser	Phe	Ser	Ile	Phe	
				230					235					240	
Arg	Ser	Asp	Ser	Ala	Leu	Gln	Tyr	His	Leu	Met	Leu	Pro	Gln	Leu	
				245					250					255	
Val	Phe	Leu	Ala	Leu	Ser	Leu	Ile	His	Leu	Cys	Val	Gln	Leu	Tyr	
				260					265					270	
Arg	Met	Met	Asp	Lys	Gly	Val	Leu	Ser	Tyr	Trp	Arg	Lys	Pro	Arg	
				275					280					285	
Asn	Trp	Leu	Glu	Val	Ala	Ser	Leu	Val	Ser	Phe	Ser	Phe	Glu	Lys	
				290					295					300	

<210> 493

<211> 2292

<212> DNA

<213> Homo Sapien

<400> 493

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ggaaggggct agaaggaagg gagtgcccca ctgttgatgg ggtaagagga 150

tcctgtactg agaagttgac cagagagggt ctcacatgc gcacagttcc 200

ttctgtacct gtgtggagga aaagtactga gtgaaggcca gaaaaagaga 250

aaacagaaat gctctgccct tggagaactg ctaacctagg gctactgttg 300
 attttgacta tcttcttagt ggccgaagcg gaggggtgctg ctcaacccaaa 350
 caactcatta atgctgcaaa ctagcaagga gaatcatgct ttagcttcaa 400
 gcagtttatg tatggatgaa aaacagatta cacagaacta ctcgaaagta 450
 ctgcgagaag ttaacacttc atggcctgta aagatggcta caaatgctgt 500
 gctttgttgc cctcctatcg cattaagaaa tttgatcata ataacatggg 550
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 ccacaatgtg tctaccgtga cctgccacgt ctcccatttg actggcaaca 1000
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 gccagctaca cagagaagaa caatcctctc tatgatacta caaacaaggt 1250
 gaaggcatct caggcattac aaagtgaagt tgacacagac ctccatactt 1300
 tataagttgt tggactctag taccaagaaa caacaacaaa cgagatacat 1350
 tataattact gtctgatttt cttacagttc tagaatgaag acttatattg 1400
 aaattaggtt ttccaaggtt cttagaagac attttaatgg attctcattc 1450
 atacccttgt ataattggaa tttttgattc ttagctgcta ccagctagtt 1500
 ctctgaagaa ctgatgttat tacaaagaaa atacatgccc atgaccaaatt 1550
 attcaaattg tgcaggacag taaataatga aaaccaaatt tcctcaagaa 1600
 ataactgaag aaggagcaag tgtgaacagt ttcttgtgta tcctttcaga 1650
 atattttaat gtacatatga catgtgtata tgccatgggt atatgtgtca 1700

	140		145		150
Gly Tyr Tyr Arg Cys Ile Met Val Thr Pro Asp Gly Asn Phe His	155		160		165
Arg Gly Tyr His Leu Gln Val Leu Val Thr Pro Glu Leu Thr Leu	170		175		180
Phe Gln Asn Arg Asn Arg Thr Ala Val Cys Lys Ala Val Ala Gly	185		190		195
Lys Pro Ala Ala Gln Ile Ser Trp Ile Pro Glu Gly Asp Cys Ala	200		205		210
Thr Lys Gln Glu Tyr Trp Ser Asn Gly Thr Val Thr Val Lys Ser	215		220		225
Thr Cys His Trp Glu Val His Asn Val Ser Thr Val Thr Cys His	230		235		240
Val Ser His Leu Thr Gly Asn Lys Ser Leu Tyr Ile Glu Leu Leu	245		250		255
Pro Val Pro Gly Ala Lys Lys Ser Ala Lys Leu Tyr Ile Pro Tyr	260		265		270
Ile Ile Leu Thr Ile Ile Ile Leu Thr Ile Val Gly Phe Ile Trp	275		280		285
Leu Leu Lys Val Asn Gly Cys Arg Lys Tyr Lys Leu Asn Lys Thr	290		295		300
Glu Ser Thr Pro Val Val Glu Glu Asp Glu Met Gln Pro Tyr Ala	305		310		315
Ser Tyr Thr Glu Lys Asn Asn Pro Leu Tyr Asp Thr Thr Asn Lys	320		325		330
Val Lys Ala Ser Gln Ala Leu Gln Ser Glu Val Asp Thr Asp Leu	335		340		345
His Thr Leu					

<210> 495
 <211> 2126
 <212> DNA
 <213> Homo Sapien

<400> 495
 ccaggtgcac agcgcacatcgc ccgaggctgt caccgccctg ccccgcccac 50
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 ggacacagaa gcgctctaagc acagcttcct ccttgccgct ccgggaagtg 150
 ggcagccagc ccaggaacca gtaccacctg caccatgggg ctgtcccga 200

aggagcaggt cttcttggcc ctgctggggg cctcgggggt ctcaggcctc 250
acggcactca ttctcctcct ggtggaggcc accagcgtgc tcctgccac 300
agacatcaag tttgggatcg tgtttgatgc gggctcctcc cacacgtccc 350
tcttctgtga tcagtggccg gcgaacaagg agaatggcac ggggtgtggtc 400
agccaggccc tggcctgcc a ggtggaagg cctggaatct cctcctacac 450
ttctaattgt gcacaggctg gtgagagcct gcagggtgc ttggaggagg 500
cgctgggtgt gatcccagag gccagcatc ggaaaacacc cacgttctctg 550
ggggccacgg ctggcatgag gttgctcagc cggaagaaca gctctcaggc 600
cagggacatc tttgcagcag tcacccaggt cctgggcccgg tctcccgtgg 650
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tggatcactg tcaactacgg cttggggacg ctggtcaagt actccttcac 750
tggagaatgg atccagcctc cggaggagat gctggtgggt gccctggaca 800
tgggaggggc ctccaccag atcacgttcg tgccctggggg ccccatcttg 850
gacaagagca cccaggccga ttttcgctc tacggctccg actacagcgt 900
ctacactcac agctacctgt gctttggacg ggaccagatg ctgagcaggc 950
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cagttgaagg gacaggcaac cctggagcct gcgtctcagc catccgggaa 1150
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ctcaccctcc tgcacgagg ctacgggttc agcgaggaga cctggcccag 1350
cctcgagttc cgaaagcagg cgggcggtgt ggacattggc tggacactgg 1400
gctacatgt gaacctgacc gggatgatcc cggccgatgc gccggctcag 1450
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gctggccctg gtggcggtgg tgggggctgc cttggtccag ctcttctggt 1550
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gctgcgtccc ggatgctgga ggttctctga gccctgagcg ccgtggggcc 1650

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 cctcccccaa cctccttcg caactgggct tccagggccg taggtgcctt 1800
 tctgcacaca ggccgccagg actcgtgggtg tctccaggct gtgtgactgc 1850
 agggccacat gctgcctgca aacagggcaa gaccacggag gcacaggggt 1900
 cctgctcctg atggggcctc aggaggggcg gagaggggtg gaagggaggg 1950
 agctgccccca cctggacccc cgctctccct gctgttgtct gagcagatgg 2000
 atggagtcca ggctggggg cttctgctgg gccagcccgg cctcccacac 2050
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 tggacacagc aaaaaaaaaa aaaaaa 2126

<210> 496
 <211> 458
 <212> PRT
 <213> Homo Sapien

<400> 496
 Met Gly Leu Ser Arg Lys Glu Gln Val Phe Leu Ala Leu Leu Gly
 1 5 10 15
 Ala Ser Gly Val Ser Gly Leu Thr Ala Leu Ile Leu Leu Val
 20 25 30
 Glu Ala Thr Ser Val Leu Leu Pro Thr Asp Ile Lys Phe Gly Ile
 35 40 45
 Val Phe Asp Ala Gly Ser Ser His Thr Ser Leu Phe Leu Tyr Gln
 50 55 60
 Trp Pro Ala Asn Lys Glu Asn Gly Thr Gly Val Val Ser Gln Ala
 65 70 75
 Leu Ala Cys Gln Val Glu Gly Pro Gly Ile Ser Ser Tyr Thr Ser
 80 85 90
 Asn Ala Ala Gln Ala Gly Glu Ser Leu Gln Gly Cys Leu Glu Glu
 95 100 105
 Ala Leu Val Leu Ile Pro Glu Ala Gln His Arg Lys Thr Pro Thr
 110 115 120
 Phe Leu Gly Ala Thr Ala Gly Met Arg Leu Leu Ser Arg Lys Asn
 125 130 135
 Ser Ser Gln Ala Arg Asp Ile Phe Ala Ala Val Thr Gln Val Leu
 140 145 150
 Gly Arg Ser Pro Val Asp Phe Trp Gly Ala Glu Leu Leu Ala Gly
 155 160 165

Gln Ala Glu Gly	Ala Phe Gly Trp Ile Thr Val Asn Tyr Gly Leu	170	175	180
Gly Thr Leu Val	Lys Tyr Ser Phe Thr Gly Glu Trp Ile Gln Pro	185	190	195
Pro Glu Glu Met	Leu Val Gly Ala Leu Asp Met Gly Gly Ala Ser	200	205	210
Thr Gln Ile Thr	Phe Val Pro Gly Gly Pro Ile Leu Asp Lys Ser	215	220	225
Thr Gln Ala Asp	Phe Arg Leu Tyr Gly Ser Asp Tyr Ser Val Tyr	230	235	240
Thr His Ser Tyr	Leu Cys Phe Gly Arg Asp Gln Met Leu Ser Arg	245	250	255
Leu Leu Val Gly	Leu Val Gln Ser Arg Pro Ala Ala Leu Leu Arg	260	265	270
His Pro Cys Tyr	Leu Ser Gly Tyr Gln Thr Thr Leu Ala Leu Gly	275	280	285
Pro Leu Tyr Glu	Ser Pro Cys Val His Ala Thr Pro Pro Leu Ser	290	295	300
Leu Pro Gln Asn	Leu Thr Val Glu Gly Thr Gly Asn Pro Gly Ala	305	310	315
Cys Val Ser Ala	Ile Arg Glu Leu Phe Asn Phe Ser Ser Cys Gln	320	325	330
Gly Gln Glu Asp	Cys Ala Phe Asp Gly Val Tyr Gln Pro Pro Leu	335	340	345
Arg Gly Gln Phe	Tyr Val Glu Ala Ser Tyr Pro Gly Gln Asp Arg	350	355	360
Trp Leu Arg Asp	Tyr Cys Ala Ser Gly Leu Tyr Ile Leu Thr Leu	365	370	375
Leu His Glu Gly	Tyr Gly Phe Ser Glu Glu Thr Trp Pro Ser Leu	380	385	390
Glu Phe Arg Lys	Gln Ala Gly Gly Val Asp Ile Gly Trp Thr Leu	395	400	405
Gly Tyr Met Leu	Asn Leu Thr Gly Met Ile Pro Ala Asp Ala Pro	410	415	420
Ala Gln Trp Arg	Ala Glu Ser Tyr Gly Val Trp Val Ala Lys Val	425	430	435
Val Phe Met Val	Leu Ala Leu Val Ala Val Val Gly Ala Ala Leu	440	445	450
Val Gln Leu Phe	Trp Leu Gln Asp			

<210> 497
 <211> 1820
 <212> DNA
 <213> Homo Sapien

<400> 497
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 cctgtgggca gcggccaggg cagccatggc ttgggcaagt aggctggggc 150
 tgctgctggc actgctgctg cccgtggctg gtgcctccac gccaggcacc 200
 gtgggtccgac tcaacaaggc agcattgagc tacgtgtctg aaattgggaa 250
 agccccctctc cagcggggccc tgcaggtcac tgtccctcat ttcctggact 300
 ggagtggaga ggcgcttcag cccaccagga tccggattct gaatgtccat 350
 gtgccccgcc tccacctgaa attcattgct ggtttcggag tgcgcctgct 400
 ggcagcagct aattttactt tcaaggctctt tcgcgccccca gagccccctgg 450
 agctgacgct gcctgtggaa ctgctggctg acaccgcgt gaccagagc 500
 tccatcagga cccctgtggt cagcatctct gcctgctctt tattctcggg 550
 ccacgccaac gagtttgatg gcagtaacag cacctccac gcgctgctgg 600
 tcttggtgca gaagcacatt aaagctgtct tgagtaacaa gctgtgcctg 650
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 tggcctcaac cccgtgggtc ctgagtccca gatccgctat tccatggtca 750
 gtgtgcccac tgtcaccagt gactacattt ccctggaagt caatgctgtt 800
 ctcttctctgc tgggcaaccc catcatcctg cccacggatg ccaccccttt 850
 tgtgttgcca aggcattgtg gtaccgaggg ctccatggcc accgtggggc 900
 tctcccagca gctgtttgac tctgcgtcc tgctgctgca gaaggccgg 950
 gccctcaacc tggacatcac agggcagctg aggtcggatg acaacctgct 1000
 gaacacctct gctctggggc ggctcatccc ggaggtggcc cgccagtttc 1050
 ccgagcccat gcctgtggtg ctcaaggctg ggctgggtgc cacacctgtg 1100
 gccatgctcc acacaaacaa cgccaccctg cggctgcagc ccttcgtgga 1150
 ggtcctggcc acagcctcca actcggtttt ccagtccctc ttctccctgg 1200
 atgtggtagt gaacttgaga ctccagctct ctgtgtccaa ggtgaagctt 1250

				140					145					150
Asn	Ser	Thr	Ser	His	Ala	Leu	Leu	Val	Leu	Val	Gln	Lys	His	Ile
				155					160					165
Lys	Ala	Val	Leu	Ser	Asn	Lys	Leu	Cys	Leu	Ser	Ile	Ser	Asn	Leu
				170					175					180
Val	Gln	Gly	Val	Asn	Val	His	Leu	Gly	Thr	Leu	Ile	Gly	Leu	Asn
				185					190					195
Pro	Val	Gly	Pro	Glu	Ser	Gln	Ile	Arg	Tyr	Ser	Met	Val	Ser	Val
				200					205					210
Pro	Thr	Val	Thr	Ser	Asp	Tyr	Ile	Ser	Leu	Glu	Val	Asn	Ala	Val
				215					220					225
Leu	Phe	Leu	Leu	Gly	Asn	Pro	Ile	Ile	Leu	Pro	Thr	Asp	Ala	Thr
				230					235					240
Pro	Phe	Val	Leu	Pro	Arg	His	Val	Gly	Thr	Glu	Gly	Ser	Met	Ala
				245					250					255
Thr	Val	Gly	Leu	Ser	Gln	Gln	Leu	Phe	Asp	Ser	Ala	Leu	Leu	Leu
				260					265					270
Leu	Gln	Lys	Ala	Gly	Ala	Leu	Asn	Leu	Asp	Ile	Thr	Gly	Gln	Leu
				275					280					285
Arg	Ser	Asp	Asp	Asn	Leu	Leu	Asn	Thr	Ser	Ala	Leu	Gly	Arg	Leu
				290					295					300
Ile	Pro	Glu	Val	Ala	Arg	Gln	Phe	Pro	Glu	Pro	Met	Pro	Val	Val
				305					310					315
Leu	Lys	Val	Arg	Leu	Gly	Ala	Thr	Pro	Val	Ala	Met	Leu	His	Thr
				320					325					330
Asn	Asn	Ala	Thr	Leu	Arg	Leu	Gln	Pro	Phe	Val	Glu	Val	Leu	Ala
				335					340					345
Thr	Ala	Ser	Asn	Ser	Ala	Phe	Gln	Ser	Leu	Phe	Ser	Leu	Asp	Val
				350					355					360
Val	Val	Asn	Leu	Arg	Leu	Gln	Leu	Ser	Val	Ser	Lys	Val	Lys	Leu
				365					370					375
Gln	Gly	Thr	Thr	Ser	Val	Leu	Gly	Asp	Val	Gln	Leu	Thr	Val	Ala
				380					385					390
Ser	Ser	Asn	Val	Gly	Phe	Ile	Asp	Thr	Asp	Gln	Val	Arg	Thr	Leu
				395					400					405
Met	Gly	Thr	Val	Phe	Glu	Lys	Pro	Leu	Leu	Asp	His	Leu	Asn	Ala
				410					415					420
Leu	Leu	Ala	Met	Gly	Ile	Ala	Leu	Pro	Gly	Val	Val	Asn	Leu	His
				425					430					435

Tyr Val Ala Pro Glu Ile Phe Val Tyr Glu Gly Tyr Val Val Ile
440 445 450

Ser Ser Gly Leu Phe Tyr Gln Ser
455

<210> 499
<211> 899
<212> DNA
<213> Homo Sapien

<400> 499
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ctgtgtggac cggcagtcct gccgcctgga gccaggacag caatgcctga 200
caacacatgc ataccttggg aagatgtggg ttttctccaa tctgcgctgt 250
ggcacaccag aagagccctg tcaggaggcc ttcaacacaa ccaaccgcaa 300
gctgggtctg acatataaca ccacctgctg caacaaggac aactgcaaca 350
gcgcaggacc cgggccact ccagccctgg gccttgcctt ccttacctcc 400
ttggctggcc ttggcctctg gctgctgcac tgagactcat tccattggct 450
gcccctctc ccacctgcct tggcctgagc ctctctccct gtgtctctgt 500
atccccctggc ttacagaat cgtctctccc tagctcccat ttctttaatt 550
aaacactggt ccgagtggc tcctcatcca tccttccac ctcacaccct 600
tcaactctct ttttctggg cccttccac ttccttccag gacctccatt 650
ggctcctaga agggctcccc actttgcttc ctatactctg ctgtccccta 700
cttgaggagg gattgggatc tgggcctgaa atggggcttc tgtgttgc 750
ccagtgaagg ctcccacaag gacctgatga cctcactgta cagagctgac 800
tccccaaacc caggctccca tatgtacccc atccccata ctcacctctt 850
tccattttga gtaataaatg tctgagtctg gaaaaaaaa aaaaaaaaa 899

<210> 500
<211> 125
<212> PRT
<213> Homo Sapien

<400> 500
Met Lys Ala Leu Met Leu Leu Thr Leu Ser Val Leu Leu Cys Trp
1 5 10 15
Val Ser Ala Asp Ile Arg Cys His Ser Cys Tyr Lys Val Pro Val

	20		25		30
Leu Gly Cys Val Asp Arg Gln Ser Cys Arg Leu Glu Pro Gly Gln					
	35		40		45
Gln Cys Leu Thr Thr His Ala Tyr Leu Gly Lys Met Trp Val Phe					
	50		55		60
Ser Asn Leu Arg Cys Gly Thr Pro Glu Glu Pro Cys Gln Glu Ala					
	65		70		75
Phe Asn Gln Thr Asn Arg Lys Leu Gly Leu Thr Tyr Asn Thr Thr					
	80		85		90
Cys Cys Asn Lys Asp Asn Cys Asn Ser Ala Gly Pro Arg Pro Thr					
	95		100		105
Pro Ala Leu Gly Leu Val Phe Leu Thr Ser Leu Ala Gly Leu Gly					
	110		115		120
Leu Trp Leu Leu His					
	125				

<210> 501
 <211> 845
 <212> DNA
 <213> Homo Sapien

<400> 501
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 gcttcttctc ctgctgctcc aggagggcag ccaaaggaga ctctggagat 150
 ggtgtggatc cgaggaagtg gttgcggtcc ttcaggagtc catcagcctc 200
 cccctggaaa taccaccaga tgaagagggtt gagaacatca tctggtcctc 250
 tcacaaaagt cttgccactg tgggtgccagg gaaagagggg catccagcta 300
 ccatcatggt gaccaatcca cactaccagg gccaaagtgag cttcctggac 350
 cccagctatt cctgcatat cagcaatctg agctgggagg attcagggt 400
 ttaccaagct caagtcaacc tgagaacatc ccagatctct accatgcagc 450
 agtacaatct atgtgtctac catcctaact atgcttctga gaagccttca 500
 acagccttct gcctcctggc caagggtattg ctcatcttct tgctcttgg 550
 aattctggcc atgggactct gggatcatccg agtccagaaa agacacaaaa 600
 tgccaaggat gaagaaactc atgagaaaca gaatgaaatt gaggaaggag 650
 gcaaagcctg gctccagccc tgctgactg ctcttggga acccagtc 700
 tgagcttggg ttcttcccag caccagaga atccttcctc agctctcttc 750

tttccagggg aaggaggtgc tcaggggtgg gtatccagag agccatactt 800

ctgaggggaag actggctggc aataaagtca aattaagtga ccaca 845

<210> 502

<211> 198

<212> PRT

<213> Homo Sapien

<400> 502

Met	Cys	Ala	Phe	Pro	Trp	Leu	Leu	Leu	Leu	Leu	Leu	Gln	Glu
1				5				10					15

Gly	Ser	Gln	Arg	Arg	Leu	Trp	Arg	Trp	Cys	Gly	Ser	Glu	Glu	Val
				20					25					30

Val	Ala	Val	Leu	Gln	Glu	Ser	Ile	Ser	Leu	Pro	Leu	Glu	Ile	Pro
				35					40					45

Pro	Asp	Glu	Glu	Val	Glu	Asn	Ile	Ile	Trp	Ser	Ser	His	Lys	Ser
				50					55					60

Leu	Ala	Thr	Val	Val	Pro	Gly	Lys	Glu	Gly	His	Pro	Ala	Thr	Ile
				65					70					75

Met	Val	Thr	Asn	Pro	His	Tyr	Gln	Gly	Gln	Val	Ser	Phe	Leu	Asp
				80					85					90

Pro	Ser	Tyr	Ser	Leu	His	Ile	Ser	Asn	Leu	Ser	Trp	Glu	Asp	Ser
				95					100					105

Gly	Leu	Tyr	Gln	Ala	Gln	Val	Asn	Leu	Arg	Thr	Ser	Gln	Ile	Ser
				110					115					120

Thr	Met	Gln	Gln	Tyr	Asn	Leu	Cys	Val	Tyr	His	Pro	Asn	Tyr	Ala
				125					130					135

Ser	Glu	Lys	Pro	Ser	Thr	Ala	Phe	Cys	Leu	Leu	Ala	Lys	Gly	Leu
				140					145					150

Leu	Ile	Phe	Leu	Leu	Leu	Val	Ile	Leu	Ala	Met	Gly	Leu	Trp	Val
				155					160					165

Ile	Arg	Val	Gln	Lys	Arg	His	Lys	Met	Pro	Arg	Met	Lys	Lys	Leu
				170					175					180

Met	Arg	Asn	Arg	Met	Lys	Leu	Arg	Lys	Glu	Ala	Lys	Pro	Gly	Ser
				185					190					195

Ser Pro Ala

<210> 503

<211> 1977

<212> DNA

<213> Homo Sapien

<400> 503

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 aagaagcatt aagaatgaag gtgttggtact aatagaaact aagtacagaa 1550
 aatttcagtt ttaggtggtt gtagctgatg agttattacc tcatagagac 1600
 tataatattc tatttggtat tatattatatt gatgtttgct gttcttcaaa 1650
 catttaaadc aagctttgga ctaattatgc taatttggtga gttctgatca 1700
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 gtaactgaat attaccttct gtaggaaaag gtggaaaata agcatctaga 1800
 aggttggtgt gaatgactct gtgctggcaa aaatgcttga aacctctata 1850
 tttctttcgt tcataagagg taaaggtcaa atttttcaac aaaagtcttt 1900
 taataacaaa agcatgcagt tctctgtgaa atctcaaata ttgttgtaat 1950
 agtctgtttc aatcttaaaa agaataca 1977

<210> 504
 <211> 339
 <212> PRT
 <213> Homo Sapien

<400> 504
 Met Ala Ala Ala Cys Gly Pro Gly Ala Ala Gly Tyr Cys Leu Leu
 1 5 10 15
 Leu Gly Leu His Leu Phe Leu Leu Thr Ala Gly Pro Ala Leu Gly
 20 25 30
 Trp Asn Asp Pro Asp Arg Met Leu Leu Arg Asp Val Lys Ala Leu
 35 40 45
 Thr Leu His Tyr Asp Arg Tyr Thr Thr Ser Arg Arg Leu Asp Pro
 50 55 60
 Ile Pro Gln Leu Lys Cys Val Gly Gly Thr Ala Gly Cys Asp Ser
 65 70 75
 Tyr Thr Pro Lys Val Ile Gln Cys Gln Asn Lys Gly Trp Asp Gly
 80 85 90
 Tyr Asp Val Gln Trp Glu Cys Lys Thr Asp Leu Asp Ile Ala Tyr
 95 100 105
 Lys Phe Gly Lys Thr Val Val Ser Cys Glu Gly Tyr Glu Ser Ser
 110 115 120
 Glu Asp Gln Tyr Val Leu Arg Gly Ser Cys Gly Leu Glu Tyr Asn
 125 130 135
 Leu Asp Tyr Thr Glu Leu Gly Leu Gln Lys Leu Lys Glu Ser Gly
 140 145 150

Lys	Gln	His	Gly	Phe	Ala	Ser	Phe	Ser	Asp	Tyr	Tyr	Tyr	Lys	Trp
				155					160					165
Ser	Ser	Ala	Asp	Ser	Cys	Asn	Met	Ser	Gly	Leu	Ile	Thr	Ile	Val
				170					175					180
Val	Leu	Leu	Gly	Ile	Ala	Phe	Val	Val	Tyr	Lys	Leu	Phe	Leu	Ser
				185					190					195
Asp	Gly	Gln	Tyr	Ser	Pro	Pro	Pro	Tyr	Ser	Glu	Tyr	Pro	Pro	Phe
				200					205					210
Ser	His	Arg	Tyr	Gln	Arg	Phe	Thr	Asn	Ser	Ala	Gly	Pro	Pro	Pro
				215					220					225
Pro	Gly	Phe	Lys	Ser	Glu	Phe	Thr	Gly	Pro	Gln	Asn	Thr	Gly	His
				230					235					240
Gly	Ala	Thr	Ser	Gly	Phe	Gly	Ser	Ala	Phe	Thr	Gly	Gln	Gln	Gly
				245					250					255
Tyr	Glu	Asn	Ser	Gly	Pro	Gly	Phe	Trp	Thr	Gly	Leu	Gly	Thr	Gly
				260					265					270
Gly	Ile	Leu	Gly	Tyr	Leu	Phe	Gly	Ser	Asn	Arg	Ala	Ala	Thr	Pro
				275					280					285
Phe	Ser	Asp	Ser	Trp	Tyr	Tyr	Pro	Ser	Tyr	Pro	Pro	Ser	Tyr	Pro
				290					295					300
Gly	Thr	Trp	Asn	Arg	Ala	Tyr	Ser	Pro	Leu	His	Gly	Gly	Ser	Gly
				305					310					315
Ser	Tyr	Ser	Val	Cys	Ser	Asn	Ser	Asp	Thr	Lys	Thr	Arg	Thr	Ala
				320					325					330
Ser	Gly	Tyr	Gly	Gly	Thr	Arg	Arg	Arg						
				335										

<210> 505
 <211> 1671
 <212> DNA
 <213> Homo Sapien

<400> 505
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 tcaccttttg aaggacaaga tgcattggaa gatgttgctg cttctgctgt 150
 tgtattacaa tgctgaggct tctatgtgcc acaggtggag cagggctgtg 200
 ctcttccttg cgcgccaccg gccaaagagg tcctcatcac tgccattgaa 250
 ccagtcctg cagacctccc tggaggaggt ggagctgctc tacgagttcc 300
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<210> 506
 <211> 173
 <212> PRT
 <213> Homo Sapien

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<210> 508

<211> 362

<212> PRT

<213> Homo Sapien

<400> 508

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Leu	Leu	Val	Phe	Gly	Val	Trp	Ile	Leu	Tyr	Ile	Leu	Lys	Leu	Asn
				20					25					30
Tyr	Thr	Thr	Glu	Glu	Cys	Asp	Met	Lys	Lys	Met	His	Tyr	Val	Asp
			35						40					45
Pro	Asp	His	Val	Lys	Arg	Ala	Gln	Lys	Tyr	Ala	Gln	Gln	Val	Leu
				50					55					60
Gln	Lys	Glu	Cys	Arg	Pro	Lys	Phe	Ala	Lys	Thr	Ser	Met	Ala	Leu
				65					70					75
Leu	Phe	Glu	His	Arg	Tyr	Ser	Val	Asp	Leu	Leu	Pro	Phe	Val	Gln
				80					85					90
Lys	Ala	Pro	Lys	Asp	Ser	Glu	Ala	Glu	Ser	Lys	Tyr	Asp	Pro	Pro
				95					100					105
Phe	Gly	Phe	Arg	Lys	Phe	Ser	Ser	Lys	Val	Gln	Thr	Leu	Leu	Glu
				110					115					120
Leu	Leu	Pro	Glu	His	Asp	Leu	Pro	Glu	His	Leu	Lys	Ala	Lys	Thr
				125					130					135
Cys	Arg	Arg	Cys	Val	Val	Ile	Gly	Ser	Gly	Gly	Ile	Leu	His	Gly
				140					145					150
Leu	Glu	Leu	Gly	His	Thr	Leu	Asn	Gln	Phe	Asp	Val	Val	Ile	Arg
				155					160					165
Leu	Asn	Ser	Ala	Pro	Val	Glu	Gly	Tyr	Ser	Glu	His	Val	Gly	Asn
				170					175					180
Lys	Thr	Thr	Ile	Arg	Met	Thr	Tyr	Pro	Glu	Gly	Ala	Pro	Leu	Ser
				185					190					195
Asp	Leu	Glu	Tyr	Tyr	Ser	Asn	Asp	Leu	Phe	Val	Ala	Val	Leu	Phe

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<210> 510
 <211> 143
 <212> PRT
 <213> Homo Sapien

<400> 510
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 Val Val Leu Trp Ser Tyr Tyr Ala Tyr Val Phe Glu Leu Cys Leu
 35 40 45
 Val Ile Tyr Leu Ile Leu Tyr His Ala Ile Phe Val Phe Phe Thr
 50 55 60
 Trp Thr Tyr Trp Lys Ser Ile Phe Thr Leu Pro Gln Gln Pro Asn
 65 70 75
 Gln Lys Phe His Leu Ser Tyr Thr Asp Lys Glu Arg Tyr Glu Asn
 80 85 90
 Glu Glu Arg Pro Glu Val Gln Lys Gln Met Leu Val Asp Met Ala
 95 100 105

Lys Lys Leu Pro Val Tyr Thr Arg Thr Gly Ser Gly Gly Gln Phe
110 115 120

Ile Gln Arg Gln Leu Glu Arg Gln Leu Ser Lys Tyr Leu Arg Lys
125 130 135

Ala Lys Ser Tyr Met Phe Ser Asn
140

<210> 511

<211> 2176

<212> DNA

<213> Homo Sapien

<400> 511

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<210> 512

<211> 178

<212> PRT

<213> Homo Sapien

<400> 512

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Trp	Gly	Ala	Ala	Ser	Ala	Leu	Ser	Leu	Ala	Gly	Ala	Ser	Leu	Val
				20					25				30	
Leu	Ser	Leu	Leu	Gln	Arg	Val	Ala	Ser	Tyr	Ala	Arg	Lys	Trp	Gln
				35					40				45	

Gln Met Arg Pro Ile Pro Thr Val Ala Arg Ala Tyr Pro Leu Val
50 55 60

Gly His Ala Leu Leu Met Lys Pro Asp Gly Arg Gly Lys Gly Arg
65 70 75

Arg Ser Ser Trp Ser Ala Thr Gly Ser Ala Ala Pro Phe Pro Pro
80 85 90

Ser Asp Gln Pro Gly Thr Arg Cys Leu Trp Arg Trp Pro Gln Glu
95 100 105

Arg Gly Ala Cys His Pro Val Glu Asn Ala Leu Pro Val Leu Val
110 115 120

Val Ala Pro Trp His Pro Pro Thr Leu Leu Val Pro His Pro Lys
125 130 135

Val Ser Ile Phe Phe Val Cys Ser Thr Gly Cys Gly Ile Ser Lys
140 145 150

Pro Leu Pro Ser Val Phe Ser His Leu Thr Ala Ala Gln Leu Ser
155 160 165

Lys Pro Cys Arg Phe Leu Leu Pro Trp Leu Gly Lys Pro
170 175

<210> 513

<211> 2403

<212> DNA

<213> Homo Sapien

<400> 513

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cctggagccc gttcagccca tccccagtt cactttgctt gtgggatctc 200

cccgttgctc ctgcccgtgg actgagtgcc aggccatcct acaagcaccc 250

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cacaggtacc acagcaagcc agtgctgtgt gtcctgagtt ccagggcgtc 400

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<210> 514
 <211> 428
 <212> PRT
 <213> Homo Sapien

<400> 514
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 Val Leu Arg Ala Leu Lys Glu Ser Gly Ala Gly Met Pro Glu Gln
 35 40 45
 Asp Lys Asp Pro Arg Val Gln Glu Asn Pro Gly Asp Gln Arg Arg
 50 55 60
 Val Pro Glu Val Thr Gly Asp Ala Arg Ser Ala Phe Arg Pro Leu
 65 70 75
 Arg Asp Asn Gly Gly Leu Ser Pro Phe Val Pro Gly Pro Gly Pro
 80 85 90
 Leu Gln Thr Asp Leu His Ala Gln Arg Ser Glu Ile Arg Tyr Asn
 95 100 105
 Gln Thr Ser Gln Thr Ser Trp Thr Ser Ser Cys Thr Asn Arg Asn
 110 115 120
 Ala Ile Ser Ser Ser Tyr Ser Ser Thr Gly Gly Leu Leu Gly Leu
 125 130 135
 Lys Arg Arg Arg Gly Pro Ala Ser Ser His Cys Gln Leu Thr Leu
 140 145 150
 Ser Ser Ser Lys Thr Val Ser Glu Asp Arg Pro Gln Ala Val Ser
 155 160 165
 Ser Gly His Thr Gln Cys Glu Lys Ala Ala Asp Ile Ala Pro Gly
 170 175 180
 Gln Thr Leu Thr Leu Arg Asn Asp Ser Ser Thr Ser Glu Ala Ser
 185 190 195

Arg	Pro	Ser	Thr	His	Lys	Phe	Pro	Leu	Leu	Pro	Arg	Arg	Arg	Gly
				200					205					210
Glu	Pro	Leu	Met	Leu	Pro	Pro	Pro	Leu	Glu	Leu	Gly	Tyr	Arg	Val
				215					220					225
Thr	Val	Glu	Asp	Leu	Asp	Arg	Glu	Lys	Glu	Ala	Ala	Phe	Gln	Arg
				230					235					240
Ile	Asn	Ser	Ala	Leu	Gln	Val	Glu	Asp	Lys	Ala	Ile	Ser	Asp	Cys
				245					250					255
Arg	Pro	Ser	Arg	Pro	Ser	His	Thr	Leu	Ser	Ser	Leu	Ala	Thr	Gly
				260					265					270
Ala	Ser	Gly	Leu	Pro	Ala	Val	Ser	Lys	Ala	Pro	Ser	Met	Asp	Ala
				275					280					285
Gln	Gln	Glu	Thr	His	Lys	Ser	Gln	Asp	Cys	Leu	Gly	Leu	Leu	Asp
				290					295					300
Pro	Leu	Ala	Ser	Ala	Ala	Gly	Val	Pro	Ser	Thr	Ala	Pro	Met	Ser
				305					310					315
Gly	Lys	Lys	His	Arg	Pro	Pro	Gly	Pro	Leu	Phe	Ser	Ser	Ser	Asp
				320					325					330
Pro	Leu	Pro	Ala	Thr	Ser	Ser	Asp	Ser	Gln	Asp	Ser	Ala	Gln	Val
				335					340					345
Thr	Ser	Leu	Ile	Pro	Ala	Pro	Phe	Pro	Ala	Ala	Ser	Met	Asp	Ala
				350					355					360
Gly	Met	Arg	Arg	Thr	Arg	His	Gly	Thr	Ser	Ala	Pro	Ala	Ala	Ala
				365					370					375
Ala	Ala	Ala	Pro	Pro	Arg	Ser	Thr	Leu	Asn	Pro	Thr	Leu	Gly	Ser
				380					385					390
Leu	Leu	Glu	Trp	Met	Glu	Ala	Leu	His	Ile	Ser	Gly	Pro	Gln	Pro
				395					400					405
Gln	Leu	Gln	Gln	Val	Pro	Arg	Gly	Gln	Asn	Gln	Arg	Ser	Gln	Thr
				410					415					420
Ser	Trp	Thr	Ser	Ser	Cys	Pro	Lys							
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<210> 515
 <211> 2171
 <212> DNA
 <213> Homo Sapien

<400> 515
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<210> 516

<211> 443

<212> PRT

<213> Homo Sapien

<400> 516

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<210> 517

<211> 3690

<212> DNA

<213> Homo Sapien

<400> 517

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<210> 518

<211> 1137

<212> PRT

<213> Homo Sapien

<400> 518

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				20				25					30	
Pro	Gly	Gln	Ala	Val	Cys	Asn	Phe	Val	Cys	Asp	Cys	Arg	Asp	Cys
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Gly	Ala	Ala	Leu	Glu 95	Gly	Pro	Gly	Pro	His 100	Ser	Asp	His	Thr	Leu 105				
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Lys	Glu	Ala	Ser	Thr 125	Ala	Ala	Leu	Arg	Ser 130	Pro	Thr	Leu	Arg	Glu 135				
Ala	Ala	Ser	Ser	Cys 140	Lys	Leu	Arg	Leu	Trp 145	Tyr	His	Ala	Ala	Ser 150				
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Gln	Glu	Leu	Ala	Val 185	Thr	Thr	Gly	Arg	Ile 190	Arg	Gly	Asp	Phe	Arg 195				
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Ala	Leu	Asp	Asp	Leu 215	Glu	Phe	Trp	Asp	Cys 220	Gly	Leu	Pro	Thr	Pro 225				
Gln	Ala	Asn	Cys	Pro 230	Pro	Gly	His	His	His 235	Cys	Gln	Asn	Lys	Val 240				
Cys	Val	Glu	Pro	Gln 245	Gln	Leu	Cys	Asp	Gly 250	Glu	Asp	Asn	Cys	Gly 255				
Asp	Leu	Ser	Asp	Glu 260	Asn	Pro	Leu	Thr	Cys 265	Gly	Arg	His	Ile	Ala 270				
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Pro	Arg	Arg	Asp	His 305	Ser	Arg	Asn	Ser	Ala 310	Gln	Gly	Ser	Phe	Leu 315				
Val	Ser	Val	Ala	Glu 320	Pro	Gly	Thr	Pro	Ala 325	Ile	Leu	Ser	Ser	Pro 330				
Glu	Phe	Gln	Ala	Ser 335	Gly	Thr	Ser	Asn	Cys 340	Ser	Leu	Val	Phe	Tyr 345				

Gln Tyr Leu Ser Gly	Ser Glu Ala Gly	Cys Leu Gln Leu Phe	Leu
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Gln Thr Leu Gly Pro	Gly Ala Pro Arg	Ala Pro Val Leu Leu	Arg
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Asp Ile Gln Ser Ala	Tyr Pro Phe Gln	Ile Leu Leu Ala Gly	Gln
395		400	405
Thr Gly Pro Gly Gly	Val Val Gly Leu	Asp Asp Leu Ile Leu	Ser
410		415	420
Asp His Cys Arg Pro	Val Ser Glu Val	Ser Thr Leu Gln Pro	Leu
425		430	435
Pro Pro Gly Pro Arg	Ala Pro Ala Pro	Gln Pro Leu Pro Pro	Ser
440		445	450
Ser Arg Leu Gln Asp	Ser Cys Lys Gln	Gly His Leu Ala Cys	Gly
455		460	465
Asp Leu Cys Val Pro	Pro Glu Gln Leu	Cys Asp Phe Glu Glu	Gln
470		475	480
Cys Ala Gly Gly Glu	Asp Glu Gln Ala	Cys Gly Thr Thr Asp	Phe
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Glu Ser Pro Glu Ala	Gly Gly Trp Glu	Asp Ala Ser Val Gly	Arg
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Leu Gln Trp Arg Arg	Val Ser Ala Gln	Glu Ser Gln Gly Ser	Ser
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Gln Leu Gly Ala Glu	Ala Arg Val Leu	Thr Pro Leu Leu Gly	Pro
545		550	555
Ser Gly Pro Ser Cys	Glu Leu His Leu	Ala Tyr Tyr Leu Gln	Ser
560		565	570
Gln Pro Arg Glu Val	Ser Cys Asn Phe	Glu Arg Asp Thr Cys	Ser
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Trp Tyr Pro Gly His	Leu Ser Asp Thr	His Trp Arg Trp Val	Glu
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Ser Arg Gly Pro Asp	His Asp His Thr	Thr Gly Gln Gly His	Phe
605		610	615
Val Leu Leu Asp Pro	Thr Asp Pro Leu	Ala Trp Gly His Ser	Ala
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His Leu Leu Ser Arg	Pro Gln Val Pro	Ala Ala Pro Thr Glu	Cys

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Phe	Gly	Ile	Tyr	Gln	Lys	Tyr	Pro	Val	Lys	Tyr	Arg	Ser	Gly	Lys					
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Cys	Trp	Asn	Asp	Asn	Gly	Pro	Ala	Ile	Pro	Val	Val	Tyr	Asp	Phe					
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Gly	Asp	Ala	Lys	Lys	Thr	Ala	Ser	Tyr	Tyr	Ser	Pro	Tyr	Gly	Gln					
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Arg	Glu	Phe	Val	Ala	Gly	Phe	Val	Gln	Phe	Arg	Val	Phe	Asn	Asn					
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Glu	Arg	Ala	Ala	Asn	Ala	Leu	Cys	Ala	Gly	Ile	Lys	Val	Thr	Gly					
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Cys	Asn	Thr	Glu	His	His	Cys	Ile	Gly	Gly	Gly	Gly	Phe	Phe	Pro					
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Gln	Gly	Lys	Pro	Arg	Gln	Cys	Gly	Asp	Phe	Ser	Ala	Phe	Asp	Trp					
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Asp	Gly	Tyr	Gly	Thr	His	Val	Lys	Ser	Ser	Cys	Ser	Arg	Glu	Ile					
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<211> 2974

<212> DNA

<213> Homo Sapien

<400> 521

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<211> 527

<212> PRT

<213> Homo Sapien

<400> 522

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Leu Ile Val Arg Gly His Glu Val Thr Val Leu Thr His Ser Lys
50 55 60

Pro Ser Leu Ile Asp Tyr Arg Lys Pro Ser Ala Leu Lys Phe Glu
65 70 75

Val Val His Met Pro Gln Asp Arg Thr Glu Glu Asn Glu Ile Phe
80 85 90

Val Asp Leu Ala Leu Asn Val Leu Pro Gly Leu Ser Thr Trp Gln
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Ser Val Ile Lys Leu Asn Asp Phe Phe Val Glu Ile Arg Gly Thr
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Leu Lys Met Met Cys Glu Ser Phe Ile Tyr Asn Gln Thr Leu Met
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Lys Lys Leu Gln Glu Thr Asn Tyr Asp Val Met Leu Ile Asp Pro
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Val Ile Pro Cys Gly Asp Leu Met Ala Glu Leu Leu Ala Val Pro
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Phe Val Leu Thr Leu Arg Ile Ser Val Gly Gly Asn Met Glu Arg
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Ser Cys Gly Lys Leu Pro Ala Pro Leu Ser Tyr Val Pro Val Pro
185 190 195

Met Thr Gly Leu Thr Asp Arg Met Thr Phe Leu Glu Arg Val Lys
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Asn Ser Met Leu Ser Val Leu Phe His Phe Trp Ile Gln Asp Tyr
215 220 225

Asp Tyr His Phe Trp Glu Glu Phe Tyr Ser Lys Ala Leu Gly Arg
230 235 240

Pro Thr Thr Leu Cys Glu Thr Val Gly Lys Ala Glu Ile Trp Leu
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Ile Arg Thr Tyr Trp Asp Phe Glu Phe	Pro Gln Pro Tyr Gln Pro	260	265	270
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Leu Pro Lys Glu Met Glu Asn Phe Val	Gln Ser Ser Gly Glu Asp	290	295	300
Gly Ile Val Val Phe Ser Leu Gly Ser	Leu Phe Gln Asn Val Thr	305	310	315
Glu Glu Lys Ala Asn Ile Ile Ala Ser	Ala Leu Ala Gln Ile Pro	320	325	330
Gln Lys Val Leu Trp Arg Tyr Lys Gly	Lys Lys Pro Ser Thr Leu	335	340	345
Gly Ala Asn Thr Arg Leu Tyr Asp Trp	Ile Pro Gln Asn Asp Leu	350	355	360
Leu Gly His Pro Lys Thr Lys Ala Phe	Ile Thr His Gly Gly Met	365	370	375
Asn Gly Ile Tyr Glu Ala Ile Tyr His	Gly Val Pro Met Val Gly	380	385	390
Val Pro Ile Phe Gly Asp Gln Leu Asp	Asn Ile Ala His Met Lys	395	400	405
Ala Lys Gly Ala Ala Val Glu Ile Asn	Phe Lys Thr Met Thr Ser	410	415	420
Glu Asp Leu Leu Arg Ala Leu Arg Thr	Val Ile Thr Asp Ser Ser	425	430	435
Tyr Lys Glu Asn Ala Met Arg Leu Ser	Arg Ile His His Asp Gln	440	445	450
Pro Val Lys Pro Leu Asp Arg Ala Val	Phe Trp Ile Glu Phe Val	455	460	465
Met Arg His Lys Gly Ala Lys His Leu	Arg Ser Ala Ala His Asp	470	475	480
Leu Thr Trp Phe Gln His Tyr Ser Ile	Asp Val Ile Gly Phe Leu	485	490	495
Leu Thr Cys Val Ala Thr Ala Ile Phe	Leu Phe Thr Lys Cys Phe	500	505	510
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<211> 2615
<212> DNA
<213> Homo Sapien

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gaggagccgc tggagcccaa aagggaagta agtcaccatg cagctgttgg 1950
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cgtccacccc taagtctgag tctatccaaa cggactgcag ctgcaggga 2050
cagatgaagc aagagccgag ttttttcatc tgaccacagt catggtggga 2100
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gaaatccac ttctgacacc tgtgtccttg ggcacatcac tgtcacctct 2200
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aaagtgcaaa tgtca 2615

<210> 524

<211> 686

<212> PRT

<213> Homo Sapien

<400> 524

Met	His	Ala	Arg	Leu	Leu	Gly	Leu	Ser	Ala	Leu	Leu	Gln	Ala	Ala	
1				5					10					15	
Glu	Gln	Ser	Ala	Arg	Leu	Tyr	Thr	Val	Ala	Tyr	Tyr	Phe	Thr	Thr	
				20					25					30	
Gly	Arg	Leu	Leu	Trp	Gly	Trp	Leu	Ala	Leu	Ala	Val	Leu	Leu	Pro	
				35					40					45	
Gly	Phe	Leu	Val	Gln	Ala	Leu	Ser	Tyr	Leu	Trp	Phe	Arg	Ala	Asp	
				50					55					60	
Gly	His	Pro	Gly	His	Cys	Ser	Leu	Val	Met	Leu	His	Leu	Leu	Gln	
				65					70					75	
Leu	Gly	Val	Trp	Lys	Arg	His	Trp	Asp	Ala	Ala	Leu	Thr	Ser	Leu	
				80					85					90	
Gln	Lys	Glu	Leu	Glu	Ala	Pro	His	Arg	Gly	Trp	Leu	Gln	Leu	Gln	
				95					100					105	
Glu	Ala	Asp	Leu	Ser	Ala	Leu	Arg	Leu	Leu	Glu	Ala	Leu	Leu	Gln	
				110					115					120	
Thr	Gly	Pro	His	Leu	Leu	Leu	Gln	Thr	Tyr	Val	Phe	Leu	Ala	Ser	
				125					130					135	
Asp	Phe	Thr	Asp	Ile	Val	Pro	Gly	Val	Ser	Thr	Leu	Phe	Ser	Trp	
				140					145					150	
Ser	Ser	Leu	Ser	Trp	Ala	Leu	Val	Ser	Tyr	Thr	Arg	Phe	Met	Gly	
				155					160					165	
Phe	Met	Lys	Pro	Gly	His	Leu	Ala	Met	Pro	Trp	Ala	Ala	Leu	Phe	
				170					175					180	
Cys	Gln	Gln	Leu	Trp	Arg	Met	Gly	Met	Leu	Gly	Thr	Arg	Val	Leu	
				185					190					195	
Ser	Leu	Val	Leu	Phe	Tyr	Lys	Ala	Tyr	His	Phe	Trp	Val	Phe	Val	
				200					205					210	
Val	Ala	Gly	Ala	His	Trp	Leu	Val	Met	Thr	Phe	Trp	Leu	Val	Ala	
				215					220					225	
Gln	Gln	Ser	Asp	Ile	Ile	Asp	Ser	Thr	Cys	His	Trp	Arg	Leu	Phe	
				230					235					240	
Asn	Leu	Leu	Val	Gly	Ala	Val	Tyr	Ile	Leu	Cys	Tyr	Leu	Ser	Phe	
				245					250					255	
Trp	Asp	Ser	Pro	Ser	Arg	Asn	Arg	Met	Val	Thr	Phe	Tyr	Met	Val	
				260					265					270	
Met	Leu	Leu	Glu	Asn	Ile	Ile	Leu	Leu	Leu	Leu	Ala	Thr	Asp	Phe	
				275					280					285	
Leu	Gln	Gly	Ala	Ser	Trp	Thr	Ser	Leu	Gln	Thr	Ile	Ala	Gly	Val	

	290		295		300
Leu Ser Gly Phe	Leu Ile Gly Ser Val	Ser Leu Val Ile Tyr Tyr			
	305		310		315
Ser Leu Leu His	Pro Lys Ser Thr Asp	Ile Trp Gln Gly Cys Leu			
	320		325		330
Arg Lys Ser Cys	Gly Ile Ala Gly Gly	Asp Lys Thr Glu Arg Arg			
	335		340		345
Asp Ser Pro Arg	Ala Thr Asp Leu Ala	Gly Lys Arg Thr Glu Ser			
	350		355		360
Ser Gly Ser Cys	Gln Gly Ala Ser Tyr	Glu Pro Thr Ile Leu Gly			
	365		370		375
Lys Pro Pro Thr	Pro Glu Gln Val Pro	Pro Glu Ala Gly Leu Gly			
	380		385		390
Thr Gln Val Ala	Val Glu Asp Ser Phe	Leu Ser His His His Trp			
	395		400		405
Leu Trp Val Lys	Leu Ala Leu Lys Thr	Gly Asn Val Ser Lys Ile			
	410		415		420
Asn Ala Ala Phe	Gly Asp Asn Ser Pro	Ala Tyr Cys Pro Pro Ala			
	425		430		435
Trp Gly Leu Ser	Gln Gln Asp Tyr Leu	Gln Arg Lys Ala Leu Ser			
	440		445		450
Ala Gln Gln Glu	Leu Pro Ser Ser Ser	Arg Asp Pro Ser Thr Leu			
	455		460		465
Glu Asn Ser Ser	Ala Phe Glu Gly Val	Pro Lys Ala Glu Ala Asp			
	470		475		480
Pro Leu Glu Thr	Ser Ser Tyr Val Ser	Phe Ala Ser Asp Gln Gln			
	485		490		495
Asp Glu Ala Pro	Thr Gln Asn Pro Ala	Ala Thr Gln Gly Glu Gly			
	500		505		510
Thr Pro Lys Glu	Gly Ala Asp Ala Val	Ser Gly Thr Gln Gly Lys			
	515		520		525
Gly Thr Gly Gly	Gln Gln Arg Gly Gly	Glu Gly Gln Gln Ser Ser			
	530		535		540
Thr Leu Tyr Phe	Ser Ala Thr Ala Glu	Val Ala Thr Ser Ser Gln			
	545		550		555
Gln Glu Gly Ser	Pro Ala Thr Leu Gln	Thr Ala His Ser Gly Arg			
	560		565		570
Arg Leu Gly Lys	Ser Ser Pro Ala Gln	Pro Ala Ser Pro His Pro			
	575		580		585

Thr Gly Thr Ala	Thr Gly Cys Ala	Thr Gly Cys Ala	Thr Gly Thr	155	160	165
170	175	180				
Gly Thr Gly Thr	Gly Cys Gly Thr	Gly Cys Ala Cys	Ala Cys Gly	185	190	195
200	205	210				
Thr Gly Thr Gly	Thr Gly Thr Thr	Thr Gly Thr Gly	Thr Gly Thr	215	220	225
230	235	240				
Thr Gly Thr Thr	Gly Thr Gly Thr	Gly Cys Cys Thr	Gly Thr Gly	245	250	255
260	265	270				
Ala Gly Ala Ala	Ala Gly Thr Gly	Ala Thr Gly Thr	Gly Thr Gly	275	280	285
290	295	300				
Ala Ala Cys Cys	Cys Ala Gly Gly	Ala Gly Ala Gly	Ala Cys	305	310	315
320	325	330				
Thr Gly Thr Gly	Cys Cys Thr Gly	Gly Gly Cys Thr	Gly Cys	335	340	345
350	355	360				
Thr Gly Cys Cys	Thr Thr Cys Cys	Ala Gly Thr Thr	Cys Thr	365	370	375
380	385	390				
Thr Gly Thr Gly	Thr Gly Ala Cys	Cys Thr Thr Thr	Thr Thr	395	400	405
410	415	420				
Ala Ala Gly Thr	Cys Ala Cys Thr	Thr Thr Thr Thr	Thr Thr	425	430	435
440	445	450				

740	745	750
Cys Ala Gly Thr Ala Cys Thr Gly Thr	Cys Ala Cys Thr Thr Cys	
755	760	765
Cys Cys Cys Cys Ala Cys Thr Thr Thr	Gly Ala Ala Gly Ala Thr	
770	775	780
Gly Ala Gly Gly Ala Gly Ala Gly Cys	Ala Cys Ala Ala Ala Thr	
785	790	795
Thr Cys Thr Ala Gly Ala Thr Gly Gly	Ala Ala Ala Thr Gly Gly	
800	805	810
Ala Gly Gly Thr Cys Ala Cys Gly Cys	Ala Gly Thr Gly Gly Ala	
815	820	825
Ala Ala Thr Ala Gly Gly Ala Thr Cys	Cys Ala Gly Ala Cys Ala	
830	835	840
Gly Ala Thr Thr Ala Ala Thr Cys Cys	Ala Ala Thr Cys Thr Cys	
845	850	855
Ala Ala Gly Cys Cys Thr Gly Ala Ala	Thr Thr Cys Thr Thr Cys	
860	865	870
Cys Ala Thr Thr Cys Cys Ala Cys Gly	Cys Thr Ala Cys Gly Cys	
875	880	885
Thr Thr Gly Ala Ala Gly Cys Thr Cys	Ala Ala Thr Cys Thr Cys	
890	895	900
Thr Cys Thr Thr Cys Cys Thr Gly Gly	Thr Thr Gly Ala Thr Thr	
905	910	915
Cys Thr Cys Cys Cys Cys Ala Cys Thr	Thr Cys Cys Cys Cys Ala	
920	925	930
Cys Cys Cys Cys Cys Ala Gly Ala Thr	Ala Thr Ala Thr Cys Cys	
935	940	945
Cys Ala Thr Cys Gly Cys Thr Gly Cys	Thr Thr Gly Gly Thr Gly	
950	955	960
Gly Ala Cys Ala Gly Thr Ala Gly Cys	Cys Ala Thr Gly Ala Cys	
965	970	975
Thr Gly Gly Gly Thr Thr Thr Thr Gly	Gly Thr Ala Ala Ala Gly	
980	985	990
Gly Thr Thr Gly Cys Thr Gly Ala Ala	Thr Ala Ala Thr Cys Ala	
995	1000	1005
Gly Gly Cys Thr Gly Cys Thr Gly Gly	Thr Thr Ala Gly Thr Thr	
1010	1015	1020
Thr Thr Thr Ala Cys Ala Thr Thr Thr	Cys Ala Cys Cys Thr Thr	
1025	1030	1035

Thr Cys Cys Cys Ala Gly Thr Gly Ala Ala Ala Thr Gly Gly Gly	1040	1045	1050
Gly Cys Cys Cys Cys Ala Thr Gly Ala Ala Ala Ala Gly Gly	1055	1060	1065
Cys Ala Gly Cys Thr Cys Ala Ala Gly Thr Thr Gly Thr Ala Ala	1070	1075	1080
Ala Thr Thr Ala Cys Thr Cys Ala Ala Ala Gly Gly Ala Ala Gly	1085	1090	1095
Gly Ala Cys Ala Gly Ala Ala Ala Gly Gly Thr Cys Thr Thr Cys	1100	1105	1110
Thr Gly Thr Thr Thr Gly Cys Ala Cys Cys Thr Ala Cys Cys Cys	1115	1120	1125
Thr Ala Ala Gly Gly Ala Thr Thr Thr Gly Gly Gly Gly Thr Ala	1130	1135	1140
Gly Ala Cys Ala Cys Thr Gly Gly Gly Ala Ala Thr Thr Thr Ala	1145	1150	1155
Cys Thr Ala Ala Thr Thr Ala Thr Gly Ala Ala Thr Thr Cys Cys	1160	1165	1170
Ala Gly Thr Gly Cys Thr Thr Thr Cys Cys Thr Thr Gly Cys Thr	1175	1180	1185
Gly Ala Ala Ala Gly Ala Gly Ala Gly Gly Cys Gly Thr Gly Gly	1190	1195	1200
Ala Ala Thr Cys Ala Ala Cys Gly Cys Thr Gly Ala Gly Thr Gly	1205	1210	1215
Ala Ala Gly Gly Cys Ala Thr Cys Ala Ala Gly Thr Thr Thr Ala	1220	1225	1230
Ala Gly Cys Thr Gly Cys Thr Ala Ala Thr Thr Ala Cys Thr Thr	1235	1240	1245
Cys Cys Thr Gly Ala Thr Cys Ala Thr Gly Cys Ala Gly Ala Ala	1250	1255	1260
Thr Ala Ala Ala Ala Gly Cys Thr Ala Cys Gly Thr Cys Cys Cys	1265	1270	1275
Thr Thr Gly Ala Ala Ala Thr Ala Cys Ala Cys Cys Ala Gly Gly	1280	1285	1290
Cys Ala Gly Cys Thr Ala Ala Ala Cys Ala Thr Ala Ala Thr Cys	1295	1300	1305
Thr Thr Thr Gly Cys Gly Thr Thr Thr Cys Cys Gly Thr Ala Gly	1310	1315	1320
Thr Gly Thr Thr Gly Gly Thr Thr Ala Ala Gly Gly Ala Ala Thr			

1325	1330	1335
Cys Cys Ala Gly Ala Thr Gly Thr Thr Ala Cys Thr Gly Cys Ala		
1340	1345	1350
Ala Thr Ala Ala Cys Cys Ala Cys Thr Cys Cys Ala Thr Ala Ala		
1355	1360	1365
Ala Cys Ala Ala Ala Ala Gly Gly Ala Ala Cys Ala Cys Cys Cys		
1370	1375	1380
Ala Gly Cys Thr Gly Thr Gly Ala Gly Ala Ala Cys Thr Gly Gly		
1385	1390	1395
Cys Thr Thr Cys Thr Cys Ala Gly Cys Ala Thr Thr Cys Gly Thr		
1400	1405	1410
Cys Cys Cys Ala Gly Cys Ala Gly Ala Gly Gly Cys Thr Cys Thr		
1415	1420	1425
Thr Cys Cys Gly Gly Gly Gly Cys Cys Ala Gly Cys Cys Cys Thr		
1430	1435	1440
Gly Gly Ala Ala Gly Ala Ala Cys Cys Cys Ala Thr Cys Ala Gly		
1445	1450	1455
Gly Gly Thr Thr Cys Thr Gly Ala Thr Gly Gly Thr Thr Gly Cys		
1460	1465	1470
Cys Cys Thr Gly Thr Thr Thr Cys Ala Gly Cys Ala Cys Ala Gly		
1475	1480	1485
Cys Cys Cys Thr Thr Ala Thr Thr Gly Gly Cys Ala Gly Gly Cys		
1490	1495	1500
Ala Gly Ala Cys Gly Gly Cys Thr Ala Cys Gly Gly Gly Cys Ala		
1505	1510	1515
Cys Ala Gly Cys Cys Ala Cys Ala Gly Gly Cys Thr Gly Ala Ala		
1520	1525	1530
Gly Gly Thr Gly Ala Gly Thr Cys Cys Ala Gly Cys Ala Cys Ala		
1535	1540	1545
Cys Ala Ala Cys Thr Thr Thr Cys Thr Gly Ala Cys Ala Gly Thr		
1550	1555	1560
Gly Ala Ala Cys Ala Gly Gly Ala Gly Thr Ala Ala Ala Cys Ala		
1565	1570	1575
Thr Gly Gly Gly Ala Cys Cys Cys Ala Cys Cys Cys Gly Ala Ala		
1580	1585	1590
Ala Cys Cys Thr Thr Thr Gly Thr Cys Thr Gly Thr Thr Gly Ala		
1595	1600	1605
Cys Thr Thr Cys Thr Thr Ala Gly Cys Ala Ala Ala Thr Gly Gly		
1610	1615	1620

Ala Gly Gly Cys Ala Gly Cys Thr Cys Thr Ala Gly Gly Cys Thr
1625 1630 1635

Cys Thr Gly Gly Ala Gly Ala Gly Thr Thr Cys Gly Gly Gly Thr
1640 1645 1650

Ala Thr Ala Gly Gly Ala Gly Ala Cys Cys Ala Thr Gly Ala Cys
1655 1660 1665

Thr Thr Gly Ala Gly Cys Ala Gly Ala Cys Thr Gly Ala Thr Ala
1670 1675 1680

Thr Ala Ala Gly Thr Gly Gly Ala Ala Thr Gly Cys Ala Ala Ala
1685 1690 1695

Cys Ala Thr Ala Thr Thr Thr Ala Gly Ala Thr Gly Gly Cys Ala
1700 1705 1710

Cys Ala Ala Cys Thr Thr Ala Ala Thr Thr Thr Ala Gly Ala Thr
1715 1720 1725

Thr Thr Ala Thr Cys Ala Gly Thr Gly Cys Thr Ala Ala Thr Ala
1730 1735 1740

Thr Ala Gly Ala Ala Ala Ala Ala Gly Cys Thr Ala Gly Thr Ala
1745 1750 1755

Thr Thr Thr Ala Thr Thr Gly Gly Gly Gly Cys Thr Thr Ala Thr
1760 1765 1770

Thr Ala Gly Ala Thr Thr Thr Thr Thr Ala Gly Thr Cys Thr Gly
1775 1780 1785

Ala Ala Thr Cys Cys Thr Cys Ala Cys Ala Ala Cys Thr Thr Ala
1790 1795 1800

Cys Gly Ala Gly Gly Gly Gly Gly Thr Thr Cys Gly Thr Thr Thr
1805 1810 1815

Thr Ala Cys Ala Gly Ala Cys Thr Ala Thr Gly Ala Thr Cys Thr
1820 1825 1830

Thr Gly Cys Ala Thr Gly Ala Thr Thr Thr Cys Cys Cys Cys Ala
1835 1840 1845

Ala Ala Gly Ala Thr Gly Cys Thr Cys Ala Thr Thr Ala Ala Gly
1850 1855 1860

Thr Ala Thr Ala Thr Gly Gly Thr Gly Ala Ala Ala Gly Thr Ala
1865 1870 1875

Gly Ala Ala Thr Thr Thr Gly Ala Ala Thr Ala Cys Ala Gly Ala
1880 1885 1890

Ala Gly Ala Cys Cys Thr Gly Gly Thr Thr Cys Thr Gly Cys Thr
1895 1900 1905

Ala Cys Thr Thr Thr Cys Thr Gly Thr Gly Thr Thr Thr Cys Thr

				1910					1915					1920
Ala	Thr	Thr	Thr	Gly 1925	Gly	Thr	Thr	Cys	Ala 1930	Ala	Ala	Cys	Cys	Ala 1935
Gly	Cys	Cys	Thr	Thr 1940	Thr	Cys	Thr	Thr	Cys 1945	Thr	Thr	Thr	Cys	Ala 1950
Ala	Ala	Ala	Cys	Ala 1955	Ala	Cys	Thr	Thr	Cys 1960	Ala	Gly	Thr	Gly	Cys 1965
Ala	Ala	Thr	Thr	Cys 1970	Ala	Thr	Gly	Gly	Thr 1975	Thr	Thr	Thr	Gly	Gly 1980
Ala	Ala	Ala	Ala	Thr 1985	Ala	Ala	Ala	Cys	Thr 1990	Thr	Gly	Ala	Thr	Thr 1995
Thr	Thr	Gly	Ala	Gly 2000	Ala	Thr	Thr	Cys	Ala 2005	Gly	Ala	Cys	Ala	Ala 2010
Thr	Ala	Ala	Gly	Thr 2015	Gly	Cys	Ala	Thr	Thr 2020	Thr	Thr	Thr	Ala	Ala 2025
Thr	Gly	Thr	Thr	Thr 2030	Ala	Thr	Thr	Cys	Thr 2035	Thr	Thr	Thr	Ala	Thr 2040
Cys	Thr	Thr	Gly	Ala 2045	Ala	Ala	Ala	Ala	Cys 2050	Thr	Gly	Ala	Thr	Ala 2055
Thr	Ala	Thr	Thr	Thr 2060	Ala	Thr	Gly	Ala	Ala 2065	Ala	Thr	Gly	Ala	Thr 2070
Ala	Thr	Gly	Thr	Gly 2075	Cys	Thr	Cys	Ala	Cys 2080	Thr	Cys	Ala	Gly	Thr 2085
Gly	Thr	Cys	Ala	Ala 2090	Cys	Ala	Cys	Thr	Thr 2095	Cys	Ala	Ala	Ala	Cys 2100
Ala	Ala	Cys	Ala	Cys 2105	Ala	Gly	Ala	Cys	Ala 2110	Gly	Thr	Ala	Cys	Ala 2115
Ala	Thr	Gly	Ala	Cys 2120	Ala	Ala	Ala	Thr	Thr 2125	Gly	Gly	Ala	Gly	Ala 2130
Thr	Cys	Ala	Gly	Cys 2135	Thr	Cys	Thr	Ala	Ala 2140	Thr	Cys	Thr	Cys	Gly 2145
Gly	Cys	Cys	Cys	Cys 2150	Cys	Ala	Ala	Thr	Thr 2155	Thr	Ala	Ala	Thr	Gly 2160
Cys	Ala	Thr	Thr	Gly 2165	Cys	Thr	Gly	Ala	Ala 2170	Thr	Ala	Thr	Thr	Cys 2175
Thr	Thr	Cys	Thr	Gly 2180	Ala	Ala	Cys	Ala	Thr 2185	Ala	Gly	Thr	Cys	Cys 2190
Ala	Thr	Cys	Cys	Cys 2195	Ala	Cys	Ala	Cys	Thr 2200	Gly	Thr	Cys	Cys	Cys 2205

Ala Thr Gly Ala Cys Ala Cys Ala Ala Gly Ala Cys Gly Cys Thr	2210	2215	2220
Cys Cys Ala Ala Gly Gly Gly Gly Cys Thr Gly Ala Ala Gly Ala	2225	2230	2235
Thr Ala Gly Ala Gly Gly Gly Ala Cys Thr Thr Cys Thr Gly Cys	2240	2245	2250
Ala Gly Thr Cys Ala Ala Gly Ala Gly Ala Gly Cys Thr Gly Gly	2255	2260	2265
Gly Ala Ala Ala Cys Thr Cys Thr Thr Gly Gly Ala Cys Ala Gly	2270	2275	2280
Thr Cys Ala Cys Ala Ala Thr Gly Thr Gly Cys Ala Thr Thr Thr	2285	2290	2295
Gly Gly Gly Thr Ala Thr Thr Ala Ala Ala Gly Gly Cys Thr Cys	2300	2305	2310
Thr Gly Cys Ala Ala Ala Gly Thr Thr Cys Thr Gly Cys Ala Cys	2315	2320	2325
Cys Ala Ala Ala Thr Ala Ala Ala Cys Cys Cys Thr Thr Gly Gly	2330	2335	2340
Ala Thr Thr Gly Gly Cys Thr Thr Gly Ala Thr Cys Cys Ala Ala	2345	2350	2355
Thr Gly Cys Cys Ala Thr Gly Thr Thr Thr Cys Cys Ala Ala Ala	2360	2365	2370
Ala Cys Cys Thr Ala Cys Thr Thr Gly Cys Cys Cys Gly Thr Gly	2375	2380	2385
Gly Gly Ala Cys Ala Cys Cys Thr Thr Ala Gly Thr Cys Cys Ala	2390	2395	2400
Thr Ala Ala Cys Ala Cys Ala Gly Gly Thr Thr Gly Gly Cys Ala	2405	2410	2415
Thr Thr Thr Cys Thr Thr Cys Thr Ala Gly Ala Gly Ala Gly Thr	2420	2425	2430
Gly Thr Gly Cys Thr Gly Thr Gly Ala Ala Ala Ala Ala Cys Ala	2435	2440	2445
Cys Thr Gly Gly Thr Cys Thr Cys Ala Cys Ala Gly Cys Ala Cys	2450	2455	2460
Cys Gly Thr Gly Cys Ala Thr Thr Cys Ala Thr Cys Cys Ala Gly	2465	2470	2475
Cys Ala Gly Gly Thr Ala Thr Thr Thr Ala Cys Cys Ala Ala Gly	2480	2485	2490
Cys Ala Gly Gly Gly Ala Cys Thr Thr Thr Gly Gly Gly Cys Cys			

2495	2500	2505
Ala Gly Gly Thr Cys Cys Gly Thr Gly Cys Thr Ala Gly Gly Cys		
2510	2515	2520
Thr Cys Thr Gly Cys Ala Gly Gly Thr Gly Gly Ala Cys Cys Ala		
2525	2530	2535
Gly Cys Cys Ala Gly Cys Cys Cys Thr Gly Ala Cys Cys Thr Cys		
2540	2545	2550
Cys Ala Thr Gly Gly Thr Gly Thr Cys Thr Cys Thr Thr Cys Thr		
2555	2560	2565
Cys Ala Thr Gly Gly Gly Ala Gly Ala Gly Gly Cys Thr Gly Cys		
2570	2575	2580
Ala Cys Ala Gly Cys Ala Gly Thr Cys Ala Thr Thr Gly Ala Gly		
2585	2590	2595
Ala Ala Ala Ala Cys Gly Ala Ala Gly Ala Ala Ala Cys Ala Cys		
2600	2605	2610
Ala Cys Ala Gly Gly Thr Ala Cys Thr Thr Thr Cys Ala Gly Ala		
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Thr Gly Cys Thr Gly Ala Thr Ala Ala Thr Gly Ala Cys Thr Ala		
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Cys Cys Ala Thr Gly Thr Gly Cys Thr Ala Ala Ala Ala Gly Ala		
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Gly Cys Thr Cys Cys Ala Gly Gly Thr Gly Thr Thr Gly Thr Cys		
2660	2665	2670
Thr Gly Thr Thr Thr Thr Thr Gly Ala Gly Ala Cys Ala Ala Thr Cys		
2675	2680	2685
Thr Thr Cys Thr Cys Gly Ala Cys Ala Ala Thr Gly Ala Gly Ala		
2690	2695	2700
Thr Ala Gly Ala Ala Thr Gly Ala Ala Cys Cys Ala Thr Gly Cys		
2705	2710	2715
Ala Ala Ala Cys Thr Thr Thr Gly Gly Gly Gly Gly Cys Thr Ala		
2720	2725	2730
Cys Gly Ala Thr Gly Gly Thr Thr Thr Thr Ala Gly Gly Ala Ala		
2735	2740	2745
Ala Gly Ala Gly Cys Thr Ala Gly Ala Gly Thr Gly Ala Ala Ala		
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Ala Ala Thr Cys Cys Thr Thr Thr Gly Ala Cys Ala Thr Ala Thr		
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Ala Thr Ala Cys Ala Thr Ala Cys Ala Ala Ala Thr Ala Ala Ala		
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Gly Ala Thr Ala Cys Ala Thr Gly Thr Gly Thr Ala Thr Ala Ala
2795 2800 2805

Thr Thr Thr Thr Ala Thr Gly Thr Ala Ala Thr Thr Gly Ala Cys
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2840 2845 2850

Thr Gly Cys Thr Thr Ala Ala Thr Gly Ala Ala Ala Ala Thr Gly
2855 2860 2865

Thr Cys Ala Ala Ala Gly Gly Thr Ala Ala Thr Ala Thr Thr Ala
2870 2875 2880

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2885 2890 2895

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Cys Ala Cys Thr Thr Ala Thr Thr Cys Ala Ala Gly Cys Ala Cys
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2945 2950 2955

Thr Ala Gly Thr Cys Ala Cys Thr Cys Ala Cys Thr Gly Gly Thr
2960 2965 2970

Gly Gly Gly Ala Ala Thr Ala Gly Ala Ala Ala Gly Thr Thr Thr
2975 2980 2985

Thr Cys Thr Cys Ala Gly Gly Cys Ala Thr Gly Cys Ala Thr Thr
2990 2995 3000

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3005 3010 3015

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3020 3025 3030

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3035 3040 3045

Gly Thr Ala Thr Thr Gly Cys Thr Gly Gly Gly Thr Thr Cys Ala
3050 3055 3060

Ala Ala Gly Gly Cys Ala Thr Gly Ala Ala Cys Ala Thr Thr Thr
3065 3070 3075

Thr Ala Cys Ala Thr Thr Thr Thr Thr Ala Thr Ala Cys Ala Ala

Thr Ala Ala Thr Gly	Thr Cys Ala Ala Ala Cys Thr Ala Cys Cys	
3095	3100	3105
Thr Thr Cys Cys Gly	Gly Ala Ala Ala Thr Gly Ala Thr Gly Cys	
3110	3115	3120
Thr Cys Ala Cys Thr	Thr Thr Ala Cys Thr Thr Thr Cys Cys Cys	
3125	3130	3135
Thr Cys Cys Ala Ala Gly	Ala Cys Thr Gly Thr Gly Thr Gly Ala	
3140	3145	3150
Ala Ala Ala Thr Gly	Cys Cys Cys Ala Thr Thr Thr Thr Cys Cys	
3155	3160	3165
Thr Ala Ala Ala Thr	Gly Cys Thr Thr Ala Cys Thr Ala Thr Gly	
3170	3175	3180
Ala Cys Thr Gly Gly	Thr Thr Thr Cys Cys Ala Ala Cys Thr Ala	
3185	3190	3195
Cys Ala Thr Thr Thr	Thr Ala Ala Thr Thr Cys Thr Thr Gly Thr	
3200	3205	3210
Thr Cys Ala Ala Thr	Cys Thr Gly Ala Thr Ala Gly Gly Cys Ala	
3215	3220	3225
Ala Ala Ala Ala Ala	Thr Gly Ala Thr Ala Thr Thr Thr Ala Ala	
3230	3235	3240
Thr Thr Thr Thr Thr	Ala Thr Thr Thr Gly Ala	
3245	3250	3255
Thr Ala Ala Thr Gly	Ala Cys Cys Thr Thr Gly Ala Ala Cys Gly	
3260	3265	3270
Thr Gly Cys Cys Cys	Ala Thr Thr Ala Gly Cys Cys Thr Thr Thr	
3275	3280	3285
Thr Gly Cys Ala Thr	Gly Thr Ala Thr Thr Cys Thr Thr Thr Thr	
3290	3295	3300
Ala Thr Gly Ala Ala	Ala Cys Ala Thr Cys Thr Gly Thr Thr Cys	
3305	3310	3315
Cys Thr Ala Thr Cys	Cys Thr Thr Cys Gly Thr Cys Ala Ala Thr	
3320	3325	3330
Gly Thr Thr Cys Cys	Thr Cys Thr Thr Cys Ala Thr Ala Thr Gly	
3335	3340	3345
Thr Thr Ala Ala Cys	Thr Thr Thr Thr Cys Thr Thr Ala Thr Thr	
3350	3355	3360
Gly Ala Thr Thr Thr	Gly Thr Thr Ala Gly Ala Gly Cys Ala Cys	
3365	3370	3375

3665	3670	3675
Thr Cys Cys Cys Ala Ala Ala Thr Gly Gly Thr Gly Ala Thr Thr		
3680	3685	3690
Cys Ala Gly Cys Thr Gly Thr Thr Cys Cys Ala Thr Thr Thr Cys		
3695	3700	3705
Cys Ala Thr Ala Thr Thr Cys Thr Cys Cys Cys Thr Thr Ala Thr		
3710	3715	3720
Thr Ala Gly Ala Ala Ala Thr Gly Ala Cys Cys Ala Cys Thr Ala		
3725	3730	3735
Thr Ala Thr Thr Ala Thr Gly Thr Thr Cys Thr Ala Ala Ala Ala		
3740	3745	3750
Thr Ala Thr Cys Thr Gly Cys Gly Thr Ala Cys Thr Thr Gly Thr		
3755	3760	3765
Gly Thr Cys Cys Cys Thr Thr Cys Cys Thr Ala Thr Ala Ala Thr		
3770	3775	3780
Cys Thr Cys Ala Gly Thr Thr Cys Ala Thr Cys Thr Cys Thr Thr		
3785	3790	3795
Thr Gly Ala Gly Cys Thr Ala Thr Cys Thr Thr Thr Thr Gly Ala		
3800	3805	3810
Thr Thr Cys Cys Thr Thr Thr Thr Thr Cys Ala Ala Ala Cys Cys		
3815	3820	3825
Ala Cys Ala Cys Thr Gly Cys Thr Thr Thr Ala Cys Thr Gly Ala		
3830	3835	3840
Ala Cys Thr Gly Thr Cys Ala Thr Cys Ala Thr Cys Thr Thr Ala		
3845	3850	3855
Thr Ala Cys Ala Thr Thr Thr Thr Thr Ala Ala Thr Ala Cys Thr		
3860	3865	3870
Cys Ala Gly Cys Ala Ala Gly Ala Cys Ala Ala Gly Thr Thr Thr		
3875	3880	3885
Cys Thr Cys Ala Ala Thr Gly Cys Cys Ala Cys Thr Cys Thr Thr		
3890	3895	3900
Thr Thr Thr Cys Ala Gly Ala Gly Thr Thr Thr Thr Thr Cys Thr		
3905	3910	3915
Gly Gly Thr Gly Gly Thr Thr Gly Thr Ala Ala Gly Ala Thr Gly		
3920	3925	3930
Thr Thr Thr Ala Thr Thr Cys Thr Thr Cys Thr Gly Gly Ala Thr		
3935	3940	3945
Ala Ala Ala Cys Thr Thr Thr Ala Gly Ala Ala Thr Cys Ala Cys		
3950	3955	3960

Thr Cys Thr Thr Thr Thr Thr Thr Gly Thr Cys Cys Ala Ala Gly Gly	3965	3970	3975
Thr Ala Ala Ala Ala Thr Ala Thr Ala Thr Cys Cys Cys Ala Cys	3980	3985	3990
Ala Thr Thr Gly Ala Gly Ala Thr Cys Ala Thr Ala Cys Thr Gly	3995	4000	4005
Ala Ala Thr Ala Thr Ala Cys Ala Gly Ala Cys Thr Ala Ala Thr	4010	4015	4020
Thr Cys Ala Gly Gly Ala Ala Ala Ala Ala Thr Gly Thr Ala	4025	4030	4035
Thr Gly Thr Cys Thr Thr Thr Ala Thr Thr Gly Cys Ala Thr Thr	4040	4045	4050
Gly Ala Gly Thr Cys Thr Thr Cys Thr Thr Ala Thr Cys Cys Ala	4055	4060	4065
Ala Thr Ala Ala Ala Ala Ala Ala Ala Gly Ala Thr Ala Thr Gly Ala	4070	4075	4080
Ala Thr Thr Thr Cys Cys Ala Thr Gly Thr Ala Thr Thr Gly Ala	4085	4090	4095
Ala Ala Thr Cys Thr Thr Cys Ala Cys Thr Gly Ala Gly Ala Cys	4100	4105	4110
Thr Thr Ala Thr Thr Thr Thr Thr Gly Gly Cys Thr Thr Thr Thr	4115	4120	4125
Cys Ala Cys Ala Thr Gly Thr Cys Cys Thr Gly Cys Ala Ala Ala	4130	4135	4140
Thr Gly Thr Ala Thr Thr Gly Thr Thr Ala Ala Ala Thr Thr Thr	4145	4150	4155
Ala Thr Thr Thr Thr Thr Ala Gly Gly Thr Ala Thr Thr Thr Thr	4160	4165	4170
Ala Gly Gly Gly Gly Ala Ala Ala Thr Gly Ala Thr Thr Thr Thr	4175	4180	4185
Cys Thr Ala Ala Ala Gly Thr Thr Thr Gly Thr Ala Thr Thr Thr	4190	4195	4200
Thr Cys Thr Ala Gly Cys Thr Thr Gly Thr Thr Ala Thr Ala Ala	4205	4210	4215
Thr Thr Thr Ala Cys Ala Thr Ala Thr Gly Ala Gly Ala Thr Ala	4220	4225	4230
Gly Thr Cys Ala Thr Thr Gly Thr Thr Gly Thr Ala Thr Ala Thr	4235	4240	4245
Thr Ala Thr Thr Thr Ala Thr Ala Ala Cys Thr Gly Ala Thr Cys			

Ala Thr Ala Thr Thr Ala Cys Thr Gly Thr Ala Thr Thr Thr Gly	4250	4255	4260
	4265	4270	4275
Thr Ala Thr Thr Gly Thr Thr Thr Thr Ala Ala Thr Ala Gly Thr	4280	4285	4290
Thr Thr Thr Thr Cys Thr Ala Thr Thr Ala Thr Thr Thr Thr Gly	4295	4300	4305
Gly Gly Thr Thr Thr Thr Cys Cys Thr Gly Gly Ala Ala Thr Ala	4310	4315	4320
Cys Ala Ala Cys Cys Thr Thr Ala Thr Thr Ala Thr Cys Thr Ala	4325	4330	4335
Cys Ala Ala Ala Thr Thr Ala Thr Gly Ala Thr Thr Gly Thr Thr	4340	4345	4350
Thr Thr Gly Cys Cys Thr Thr Thr Thr Cys Cys Ala Ala Thr Gly	4355	4360	4365
Thr Thr Cys Ala Thr Ala Ala Cys Thr Gly Thr Thr Thr Thr Thr	4370	4375	4380
Ala Thr Ala Thr Thr Cys Thr Thr Gly Thr Cys Thr Gly Ala Thr	4385	4390	4395
Thr Gly Cys Thr Thr Thr Gly Thr Thr Cys Ala Gly Cys Ala Cys	4400	4405	4410
Thr Thr Cys Thr Ala Gly Ala Ala Thr Ala Ala Ala Gly Thr Cys	4415	4420	4425
Ala Thr Gly Cys Ala Ala Thr Ala Cys Thr Ala Ala Thr Gly Ala	4430	4435	4440

<210> 526

<211> 100

<212> PRT

<213> Homo Sapien

<400> 526

Met Ser Ala Met Lys Ser Val Leu Pro Leu Leu Asn Pro Tyr Cys	1	5	10	15
Val Leu Ala Phe Val Tyr Ala Cys Met Cys Val Arg Ala His Val	20	25	30	
Cys Val Cys Val Tyr Met Cys Met Cys Val Leu Cys Ala Cys Val	35	40	45	
Cys Thr Cys Arg Lys Lys Val Met Cys Gly Asn Gly Glu Phe Gln	50	55	60	
Pro Arg Arg Arg Leu Cys Leu Gly Leu Pro Arg Glu Val Val Thr	65	70	75	

Leu Arg Glu Thr Gly Ser Lys Cys Thr Leu Pro Ser Ser Ser Leu
80 85 90

Cys Asp Leu Gly Gln Val Thr Ser Ala Pro
95 100

<210> 527
<211> 957
<212> DNA
<213> Homo Sapien

<400> 527
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tcctaaagat atcaagatga tatcaccaga cttgcccttt ttgacaattg 100
tcttgatcat agttagttgg acaacttggt gagcactagc catacttctt 150
tcttatcttt actatgtgtt taaggttgtt catctgcaag ccagcttaac 200
aacttttaag aatagccagc ctgtgaatcc caaacactct agaagaagtg 250
aaaagaaaac caatcatcat aaagactcct caatacacca tcttcgttta 300
tctgccaacg atgctgaaga tagccttcgc atgcacagta ctgtgattaa 350
cttactaaca tggattgtat tactcagcat gccttctcta atttattggc 400
taaagaatct taggtattat tttaaactta atcctgatcc atgtaaacct 450
ttggcattta tccttattcc gactatggca attcttggaa atacttacac 500
tgtttcaata aaatcaagta aattgttgaa gactacttca caatttccac 550
ttcctctggc tgttggtgtg attgcttttg ggtcagcaca tttatatagg 600
cttccatgct ttgtcttcat tcctctttta ctccatgcat tatgcaactt 650
tatgtaagat tggacttaag gaatgatgaa gataatttat gtgttttaggg 700
ccagtataaa gagggaacac acagatccat cagtatggac agcaagatcc 750
tttgagaag acaagtctat ttttacaata ttgaaaatag gaaattagtt 800
ttgtaatgtt tgaggaagt agttgaagca tggttttgtt ttgtggtgtg 850
gaatccatgt actaatcatt tttgaaaaat tcatgaaggg atatatggtg 900
atcactatca ttgaggactc ctgtgcatat aaaatagtct gttttatcaa 950
ctgtaaa 957

<210> 528
<211> 196
<212> PRT
<213> Homo Sapien

<400> 528

Met	Ile	Ser	Pro	Asp	Leu	Pro	Phe	Leu	Thr	Ile	Val	Leu	Ile	Ile	1	5	10	15
Val	Ser	Trp	Thr	Thr	Cys	Gly	Ala	Leu	Ala	Ile	Leu	Leu	Ser	Tyr	20	25	30	
Leu	Tyr	Tyr	Val	Phe	Lys	Val	Val	His	Leu	Gln	Ala	Ser	Leu	Thr	35	40	45	
Thr	Phe	Lys	Asn	Ser	Gln	Pro	Val	Asn	Pro	Lys	His	Ser	Arg	Arg	50	55	60	
Ser	Glu	Lys	Lys	Ser	Asn	His	His	Lys	Asp	Ser	Ser	Ile	His	His	65	70	75	
Leu	Arg	Leu	Ser	Ala	Asn	Asp	Ala	Glu	Asp	Ser	Leu	Arg	Met	His	80	85	90	
Ser	Thr	Val	Ile	Asn	Leu	Leu	Thr	Trp	Ile	Val	Leu	Leu	Ser	Met	95	100	105	
Pro	Ser	Leu	Ile	Tyr	Trp	Leu	Lys	Asn	Leu	Arg	Tyr	Tyr	Phe	Lys	110	115	120	
Leu	Asn	Pro	Asp	Pro	Cys	Lys	Pro	Leu	Ala	Phe	Ile	Leu	Ile	Pro	125	130	135	
Thr	Met	Ala	Ile	Leu	Gly	Asn	Thr	Tyr	Thr	Val	Ser	Ile	Lys	Ser	140	145	150	
Ser	Lys	Leu	Leu	Lys	Thr	Thr	Ser	Gln	Phe	Pro	Leu	Pro	Leu	Ala	155	160	165	
Val	Gly	Val	Ile	Ala	Phe	Gly	Ser	Ala	His	Leu	Tyr	Arg	Leu	Pro	170	175	180	
Cys	Phe	Val	Phe	Ile	Pro	Leu	Leu	Leu	His	Ala	Leu	Cys	Asn	Phe	185	190	195	
Met																		

<210> 529
 <211> 1997
 <212> DNA
 <213> Homo Sapien

<400> 529
 gcgagccggg tcccaccatg gccgcgaatt attccagtag cagtaccggg 50
 agagaacatg tcaaagttaa aaccagctcc cagccaggct tcctggaacg 100
 gctgagcgag acctcgggtg ggatgtttgt ggggctcatg gccttctctg 150
 tctccttcta cctaattttc accaatgagg gccgcgcatt gaagacggca 200
 acctcattgg ctgaggggct ctcgcttggt gtgtctcccg acagcatcca 250

cagtgtggct ccggagaatg aaggaaggct ggtgcacatc attggcgctt 300
 tacggacatc caagcttttg tctgatccaa actatggggg ccatcttccg 350
 gctgtgaaac tgcggaggca cgtggagatg taccaatggg tagaaactga 400
 ggagtccagg gagtacaccg aggatgggca ggtgaagaag gagacgaggt 450
 attcctacaa cactgaatgg aggtcagaaa tcatcaacag caaaaacttc 500
 gaccgagaga ttggccacaa aaaccccggt gccatggcag tggagtcatt 550
 catggcaaca gccccctttg tccaaattgg cagggttttc ctctcgtcag 600
 gcctcatcga caaagtcgac aacttcaagt ccctgagcct atccaagctg 650
 gaggaccctc atgtggacat cattcgccgt ggagactttt tctaccacag 700
 cgaaaatccc aagtatccag aggtgggaga cttgctgtgc tccttttcct 750
 atgctggact gagcggcgat gacctgacc tgggcccagc tcacgtggtc 800
 actgtgattg cccggcagcg gggtgaccag ctagtcccat tctccaccaa 850
 gtctggggat accttactgc tcctgcacca cggggacttc tcagcagagg 900
 aggtgtttca tagagaacta aggagcaact ccatgaagac ctggggcctg 950
 cgggcagctg gctggatggc catgttcatg ggctcaacc ttatgacacg 1000
 gatcctctac accttggtgg actggtttcc tgttttcga gacctggtca 1050
 acattggcct gaaagccttt gccttctgtg tggccacctc gctgacctg 1100
 ctgaccgtgg cggctggctg gctcttctac cgacctgt gggccctcct 1150
 cattgccggc ctggcccttg tgccatcct tgttgctcg acacgggtgc 1200
 cagccaaaaa gttggagtga aaagacctg gcacccgccc gacacctgcg 1250
 tgagccctga ggctggttg acaatgccc cgctgctg gctgctttca 1300
 cctgggagtg ctttcgatgt gggcacctgg gcttctagg gctgcttctg 1350
 agtggttctt tcacgtgttg tgtccatagc tttagtcttc ctaaataaga 1400
 tccaccaca cctaagtcac agaatttcta agttcccaa ctactctcac 1450
 acccttttaa agataaagta tgttgtaacc aggacgtctt aatgattct 1500
 ttgtgtacct tttctgtcat attcagaaac cgttctgtgc ctgctgggag 1550
 taattccttt agcaattaag tatttggtag ctgaataagg ggtcagaact 1600
 tctgaaacca gagatctgta atcatctcta ttggcctggg gtgcctgtgc 1650
 tataaatgag tttcttcaca tgaaaaacac agccagccc agatgactta 1700

tctgggttta ggattcaata gtattcacta actgcttatt acatgagcaa 1750
 tttcatcaaa tctccaaact cttaaaggat gctttcggaa aacacgctgt 1800
 atacctagat gatgactaaa tgcaaaatcc ttgggctttg gtttttttct 1850
 agtaaggatt ttaaataact gccgacttca aaagtgttct taaaacgaaa 1900
 gataatgtta agaaaaattht gaaagctttg gaaaacccaaa tttgtaatat 1950
 cattgtattht tttattaaaa gttttgtaat aaattttctaa attatca 1997

<210> 530

<211> 400

<212> PRT

<213> Homo Sapien

<400> 530

Met	Ala	Ala	Asn	Tyr	Ser	Ser	Thr	Ser	Thr	Arg	Arg	Glu	His	Val
1				5					10					15
Lys	Val	Lys	Thr	Ser	Ser	Gln	Pro	Gly	Phe	Leu	Glu	Arg	Leu	Ser
				20					25					30
Glu	Thr	Ser	Gly	Gly	Met	Phe	Val	Gly	Leu	Met	Ala	Phe	Leu	Leu
				35					40					45
Ser	Phe	Tyr	Leu	Ile	Phe	Thr	Asn	Glu	Gly	Arg	Ala	Leu	Lys	Thr
				50					55					60
Ala	Thr	Ser	Leu	Ala	Glu	Gly	Leu	Ser	Leu	Val	Val	Ser	Pro	Asp
				65					70					75
Ser	Ile	His	Ser	Val	Ala	Pro	Glu	Asn	Glu	Gly	Arg	Leu	Val	His
				80					85					90
Ile	Ile	Gly	Ala	Leu	Arg	Thr	Ser	Lys	Leu	Leu	Ser	Asp	Pro	Asn
				95					100					105
Tyr	Gly	Val	His	Leu	Pro	Ala	Val	Lys	Leu	Arg	Arg	His	Val	Glu
				110					115					120
Met	Tyr	Gln	Trp	Val	Glu	Thr	Glu	Glu	Ser	Arg	Glu	Tyr	Thr	Glu
				125					130					135
Asp	Gly	Gln	Val	Lys	Lys	Glu	Thr	Arg	Tyr	Ser	Tyr	Asn	Thr	Glu
				140					145					150
Trp	Arg	Ser	Glu	Ile	Ile	Asn	Ser	Lys	Asn	Phe	Asp	Arg	Glu	Ile
				155					160					165
Gly	His	Lys	Asn	Pro	Ser	Ala	Met	Ala	Val	Glu	Ser	Phe	Met	Ala
				170					175					180
Thr	Ala	Pro	Phe	Val	Gln	Ile	Gly	Arg	Phe	Phe	Leu	Ser	Ser	Gly
				185					190					195
Leu	Ile	Asp	Lys	Val	Asp	Asn	Phe	Lys	Ser	Leu	Ser	Leu	Ser	Lys

200	205	210
Leu Glu Asp Pro His Val Asp Ile Ile	Arg Arg Gly Asp Phe Phe	
215	220	225
Tyr His Ser Glu Asn Pro Lys Tyr Pro	Glu Val Gly Asp Leu Arg	
230	235	240
Val Ser Phe Ser Tyr Ala Gly Leu Ser	Gly Asp Asp Pro Asp Leu	
245	250	255
Gly Pro Ala His Val Val Thr Val Ile	Ala Arg Gln Arg Gly Asp	
260	265	270
Gln Leu Val Pro Phe Ser Thr Lys Ser	Gly Asp Thr Leu Leu Leu	
275	280	285
Leu His His Gly Asp Phe Ser Ala Glu	Glu Val Phe His Arg Glu	
290	295	300
Leu Arg Ser Asn Ser Met Lys Thr Trp	Gly Leu Arg Ala Ala Gly	
305	310	315
Trp Met Ala Met Phe Met Gly Leu Asn	Leu Met Thr Arg Ile Leu	
320	325	330
Tyr Thr Leu Val Asp Trp Phe Pro Val	Phe Arg Asp Leu Val Asn	
335	340	345
Ile Gly Leu Lys Ala Phe Ala Phe Cys	Val Ala Thr Ser Leu Thr	
350	355	360
Leu Leu Thr Val Ala Ala Gly Trp Leu	Phe Tyr Arg Pro Leu Trp	
365	370	375
Ala Leu Leu Ile Ala Gly Leu Ala Leu	Val Pro Ile Leu Val Ala	
380	385	390
Arg Thr Arg Val Pro Ala Lys Lys Leu	Glu	
395	400	

<210> 531
 <211> 539
 <212> DNA
 <213> Homo Sapien

<400> 531
 aaaaaaaaaa aaaaaaagaa gctcttatgc caggaacctg gaatggagac 50
 caaatatata ttggttatat catagtatca cagggttact ttggcatttg 100
 ggaaacttga gagaaatggg caataactgt tactttaaaa gcttgggtgc 150
 tgtgattctg ccttcagcct cagccacttt tgtggtgctt tgcgtggcat 200
 cagtacctcc actgattctt ctgtctttcc tctctctctt cccccctct 250
 ttcccttctg tttttctcag atctaagggt tataatggag gggcaaactg 300

cctggctatt tcagataaga cttcactgag tgactgttca gcccatgatt 350
 tacctgcag ttttaacaggc tcaggaatta ggtcgcatca gttgagcgcg 400
 ggctacttag gcctataatc atcatcagac ggcaattaaa ggaccatttc 450
 tgcctttttc actattacat cccccgcctg tagcccagcc tgccatacag 500
 tagatactca ataaatattt gctgaatgat aaccaataa 539

<210> 532
 <211> 100
 <212> PRT
 <213> Homo Sapien

<400> 532
 Met Gly Asn Asn Cys Tyr Phe Lys Ser Leu Gly Ala Val Ile Leu
 1 5 10 15
 Pro Ser Ala Ser Ala Thr Phe Val Val Leu Cys Val Ala Ser Val
 20 25 30
 Pro Pro Leu Ile Leu Leu Ser Phe Leu Ser Leu Phe Pro Pro Ser
 35 40 45
 Phe Pro Ser Val Phe Leu Arg Ser Lys Gly Tyr Asn Gly Gly Ala
 50 55 60
 Asn Cys Leu Ala Ile Ser Asp Lys Thr Ser Leu Ser Asp Cys Ser
 65 70 75
 Ala His Asp Leu Pro Cys Ser Leu Thr Gly Ser Gly Ile Arg Ser
 80 85 90
 His Gln Leu Ser Ala Gly His Leu Gly Leu
 95 100

<210> 533
 <211> 2048
 <212> DNA
 <213> Homo Sapien

<400> 533
 cggggtgtac gaaagagaaa cccggagggc gccggggact gggccggggt 50
 ctgcagggct cagctgagcc catgagctcc cagagctaac ccctgaacac 100
 ccaggcgggc aaagggtga tgcggtagt ccccatcctg gaggggcagg 150
 ctctgcgcat ctgctcctgg catggcgctg cggcacctcg ccctcctggc 200
 tggccttctc gtgggagtcg ccagcaagtc catggagaac acggcccagc 250
 tgcccagtg ctgtgtggat gtggtggcg tcaacgccag ctgccaggc 300
 gcaagtctgt gtggtccagg ctgttacagg cgctggaacg cggacgggag 350
 cgccagctgc gtccgctgtg ggaacggaac cctcccagcc tacaacggct 400

ccgagtgtag	aagcttttgc	ggcccggtg	cgccattccc	catgaacaga	450
agctcagga	cccccgggcg	gccacatcct	ggggctccgc	gcgtggccgc	500
ctccctcttc	ctgggcacgt	tcttcattag	ctccggcctc	atcctctccg	550
tagctgggtt	cttctacctc	aagcgctcca	gtaaactccc	cagggcctgc	600
tacagaagaa	acaaagctcc	ggccctgcag	cctggcgaag	ccgctgcaat	650
gatccccccg	ccacagtcct	cagacgtggg	gtctgcagga	aaggaggacc	700
caccacgaca	gggcagaccc	ccaataacctg	ctcctccttg	aagtccagct	750
ccacccgagg	acagacgcag	ccggcctccg	ccaggccctc	ctgagcagcc	800
atcgcttcag	tgggtgctggg	tcaggcggac	ccaagagtca	gcccgtagcg	850
aagccgcgct	acgtcaggcg	ggagcggccc	ctggacaggg	ccacggatcc	900
cgctgccttc	ccgggggagg	cccgtatcag	caatgtctga	cctggaggcc	950
gagaccacgc	cacgcacttg	gcggcagga	cccggaggcc	gaccccttgg	1000
cggaaccag	cacaaagtgt	tggcatcgcc	cggcgcccgg	gacagtcctg	1050
ggcacagcct	cggctctggg	tcctccgcc	tcccagcgac	ggacgcaaaa	1100
gggtcccggg	ccgcctgagg	ctctcccca	ccacagccat	ctcgtttata	1150
ggaccaggag	caggcatcca	tgagacctca	gagcttcaga	tcgaggcctt	1200
gggggggtccg	ggccccccca	ggaaacacgg	tgaggcccca	gcgcctgcag	1250
ccaaagctgg	cacgatctat	ggggcaggtg	ccgctctgcc	tagaaaagcc	1300
aggggctctg	ctgccgtgcc	ctccagagcc	cacagcgggc	aggactcctc	1350
cagcaccacc	acaccagtg	gcccagagacc	cctctgagaa	cagtgaggct	1400
ggtcctcgctg	ccgttcacgc	cggtgcccg	ccagtgggga	ggacacagcc	1450
taggaaccag	ctgcctgaga	ccagggtgcc	tctgggctgt	cctccgcgt	1500
ggcggagacc	ccaagcacgc	agccacccat	ttccggagct	gcaggataga	1550
gcttcctctt	gatctctgtt	tttaagcaga	aattcattgt	gcagaaaagt	1600
cctccagagc	tctgtggccc	cgctcggatc	cgctggaccc	ccatgcctgg	1650
ctgatccctg	cccacgtggg	gcaggcccac	atctaacccc	cacaagtcac	1700
tgccctactg	cacctgccaa	ggctgccctg	gcgctgagtc	ctgggggtccc	1750
tcccggagtt	cctgggagaa	aggcgccgtc	gtggccgcct	cccgcacgcc	1800
aggcccgggc	tccaccgtgg	gtctcagacg	ccctgcggca	ccggcaccgt	1850

ctgcttttagc atgggacccc catctgaggg gtggcctggc cttcggggtc 1900
cccacgctcc tttgcgaagt ccactgtggg tgccatcatg gtctccggga 1950
cctggggccag cgggaaactg ggggcactgg gtgtgctgat ataaagtcgg 2000
cattactcaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa 2048

<210> 534
<211> 189
<212> PRT
<213> Homo Sapien

<400> 534
Met Ala Leu Arg His Leu Ala Leu Leu Ala Gly Leu Leu Val Gly
1 5 10 15
Val Ala Ser Lys Ser Met Glu Asn Thr Ala Gln Leu Pro Glu Cys
20 25 30
Cys Val Asp Val Val Gly Val Asn Ala Ser Cys Pro Gly Ala Ser
35 40 45
Leu Cys Gly Pro Gly Cys Tyr Arg Arg Trp Asn Ala Asp Gly Ser
50 55 60
Ala Ser Cys Val Arg Cys Gly Asn Gly Thr Leu Pro Ala Tyr Asn
65 70 75
Gly Ser Glu Cys Arg Ser Phe Ala Gly Pro Gly Ala Pro Phe Pro
80 85 90
Met Asn Arg Ser Ser Gly Thr Pro Gly Arg Pro His Pro Gly Ala
95 100 105
Pro Arg Val Ala Ala Ser Leu Phe Leu Gly Thr Phe Phe Ile Ser
110 115 120
Ser Gly Leu Ile Leu Ser Val Ala Gly Phe Phe Tyr Leu Lys Arg
125 130 135
Ser Ser Lys Leu Pro Arg Ala Cys Tyr Arg Arg Asn Lys Ala Pro
140 145 150
Ala Leu Gln Pro Gly Glu Ala Ala Ala Met Ile Pro Pro Pro Gln
155 160 165
Ser Ser Asp Val Gly Ser Ala Gly Lys Glu Asp Pro Pro Arg Gln
170 175 180
Gly Arg Pro Pro Ile Pro Ala Pro Pro
185

<210> 535
<211> 1106
<212> DNA
<213> Homo Sapien

<400> 535

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cagcctgccc ccaggactgc ccctgaccca ggcgcgcccc ctgctcgggtg 100
gcaggagggc cggcggagcg ccattggcctg catcctgaag agaaagtctg 150
tgattgctgt gagcttcata gcagcgttcc ttttctgct ggttgtgcgt 200
cttgtaaagt aagtgaattt ccattgcta ctaaactgct ttggacaacc 250
tggatacaaag tggataccat tctcctacac atacaggcgg ccccttcgaa 300
ctcactatgg atacataaat gtgaagacac aagagccttt gcaactggac 350
tgtgaccttt gtgccatagt gtcaaactca ggtcagatgg ttggccagaa 400
ggtgggaaat gagatagatc gatcctcctg catttggaga atgaacaatg 450
ccccaccaa aggttatgaa gaagatgtcg gccgcatgac catgattcga 500
gttgtgtccc ataccagcgt tcctcttttg ctaaaaaacc ctgattattt 550
tttcaaggaa gcgaatacta ctatttatgt tatttgggga cctttccgca 600
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gttggtatct atccgaatgc ccaaataac gtgaccacag agaagcgcac 700
gagttactgt gatggagttt ttaagaagga aactgggaag gacagtacag 750
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agacttgctg cataattatt caggatgat gggttacagtt tttaaaaagg 1000
aagggaatt gtggtatgtg gtatgtaaat atttttaaat gttgtctctc 1050
tgttttgatc agtttttgtt ttattcaatt tgtctttatt aaatcttacc 1100
aaagca 1106

<210> 536

<211> 210

<212> PRT

<213> Homo Sapien

<400> 536

Met	Ala	Cys	Ile	Leu	Lys	Arg	Lys	Ser	Val	Ile	Ala	Val	Ser	Phe
1				5				10					15	
Ile	Ala	Ala	Phe	Leu	Phe	Leu	Leu	Val	Val	Arg	Leu	Val	Asn	Glu
				20				25					30	

Val	Asn	Phe	Pro	Leu	Leu	Leu	Asn	Cys	Phe	Gly	Gln	Pro	Gly	Thr
				35					40					45
Lys	Trp	Ile	Pro	Phe	Ser	Tyr	Thr	Tyr	Arg	Arg	Pro	Leu	Arg	Thr
				50					55					60
His	Tyr	Gly	Tyr	Ile	Asn	Val	Lys	Thr	Gln	Glu	Pro	Leu	Gln	Leu
				65					70					75
Asp	Cys	Asp	Leu	Cys	Ala	Ile	Val	Ser	Asn	Ser	Gly	Gln	Met	Val
				80					85					90
Gly	Gln	Lys	Val	Gly	Asn	Glu	Ile	Asp	Arg	Ser	Ser	Cys	Ile	Trp
				95					100					105
Arg	Met	Asn	Asn	Ala	Pro	Thr	Lys	Gly	Tyr	Glu	Glu	Asp	Val	Gly
				110					115					120
Arg	Met	Thr	Met	Ile	Arg	Val	Val	Ser	His	Thr	Ser	Val	Pro	Leu
				125					130					135
Leu	Leu	Lys	Asn	Pro	Asp	Tyr	Phe	Phe	Lys	Glu	Ala	Asn	Thr	Thr
				140					145					150
Ile	Tyr	Val	Ile	Trp	Gly	Pro	Phe	Arg	Asn	Met	Arg	Lys	Asp	Gly
				155					160					165
Asn	Gly	Ile	Val	Tyr	Asn	Met	Leu	Lys	Lys	Thr	Val	Gly	Ile	Tyr
				170					175					180
Pro	Asn	Ala	Gln	Ile	Tyr	Val	Thr	Thr	Glu	Lys	Arg	Met	Ser	Tyr
				185					190					195
Cys	Asp	Gly	Val	Phe	Lys	Lys	Glu	Thr	Gly	Lys	Asp	Ser	Thr	Glu
				200					205					210

<210> 537
 <211> 1333
 <212> DNA
 <213> Homo Sapien

<400> 537
 gttttattga caatacatgc atcatatctt ttgactttga aggatatctc 50
 atgtcaaagg aatcaagtta tgatttatag aggattcagc tggaataacct 100
 tgtgggtgct ggctgagggg ggcaaaacgc ctaccgagac atgaagggtt 150
 tagccactag ttttgtcctt gggagcctgg ggttggcctt ctacctgcct 200
 ttggtggtga ctacacctaa aacctggcc atccctgaga agctgcaaga 250
 agctgtgggg aaagtatatca tcaatgccac aacctgtact gtcacctgtg 300
 gccttggtta taaggaggag accgtctgtg aggtgggccc tgatggagtg 350
 agaaggaaat gtcagactca gcgcttagaa tgtctgacca actggatctg 400

tgggatgctc catttcacca ttctcattgg caaggaattt gagcttagct 450
 gtctgagttc agacatcttg gagtttggac aggaagcttt ccggttcacc 500
 tggagacttg ctcgaggtgt catctccact gacgatgagg tcttcaaacc 550
 ctttcaagcc aactcccact ttgtgaagtt taaatatgct caggagtatg 600
 actctgggac atatcgctgt gatgtgcagc tggtaaaaaa cttgagactt 650
 gtcaagaggc tctatttttg gttgagggtc cttcctccta acttggtgaa 700
 tctgaatttc catcagtcac ttactgagga tcagaagtta atagatgagg 750
 gattggaagt taatctggac agctactcca agcctcacca cccaaagtgg 800
 aaaaagaagg tggcgtcagc cttgggaata ggaattgcca ttggagtggg 850
 tgggtggcgtg ttggtgagga ttgtcctctg tgcgctaagg gggggcctgc 900
 agcagtgaca gcttcaagaa cttaacagcc ttgctcctga agaactggct 950
 gcccaggaag ccaagctagc tttttagggg agtggtccag ctgctggtag 1000
 tggatcagct tagaggggaa actcccacag ccaaaagaat gagtgggaga 1050
 aatggagggg acaatctcct gggagctatg cgcagtaacc taacttcctt 1100
 atgtcccatg gatctcttcc tgatcttccc tgcccattgg gtaccagga 1150
 aactgcaagc attgcctgtg ttctgggaa gagttctaag aagcttgcat 1200
 tcattttcta ccttttatga cttggatgcc tccccacctc catttcccct 1250
 cttctgagct gtgtattcat gtagagggat gtattcagcc tttttagtga 1300
 acattttttt tcaataaaag taattcacag taa 1333

<210> 538

<211> 255

<212> PRT

<213> Homo Sapien

<400> 538

Met	Lys	Val	Leu	Ala	Thr	Ser	Phe	Val	Leu	Gly	Ser	Leu	Gly	Leu
1				5					10					15
Ala	Phe	Tyr	Leu	Pro	Leu	Val	Val	Thr	Thr	Pro	Lys	Thr	Leu	Ala
				20					25					30
Ile	Pro	Glu	Lys	Leu	Gln	Glu	Ala	Val	Gly	Lys	Val	Ile	Ile	Asn
				35					40					45
Ala	Thr	Thr	Cys	Thr	Val	Thr	Cys	Gly	Leu	Gly	Tyr	Lys	Glu	Glu
				50					55					60
Thr	Val	Cys	Glu	Val	Gly	Pro	Asp	Gly	Val	Arg	Arg	Lys	Cys	Gln
				65					70					75

Thr	Gln	Arg	Leu	Glu	Cys	Leu	Thr	Asn	Trp	Ile	Cys	Gly	Met	Leu
				80					85					90
His	Phe	Thr	Ile	Leu	Ile	Gly	Lys	Glu	Phe	Glu	Leu	Ser	Cys	Leu
				95					100					105
Ser	Ser	Asp	Ile	Leu	Glu	Phe	Gly	Gln	Glu	Ala	Phe	Arg	Phe	Thr
				110					115					120
Trp	Arg	Leu	Ala	Arg	Gly	Val	Ile	Ser	Thr	Asp	Asp	Glu	Val	Phe
				125					130					135
Lys	Pro	Phe	Gln	Ala	Asn	Ser	His	Phe	Val	Lys	Phe	Lys	Tyr	Ala
				140					145					150
Gln	Glu	Tyr	Asp	Ser	Gly	Thr	Tyr	Arg	Cys	Asp	Val	Gln	Leu	Val
				155					160					165
Lys	Asn	Leu	Arg	Leu	Val	Lys	Arg	Leu	Tyr	Phe	Gly	Leu	Arg	Val
				170					175					180
Leu	Pro	Pro	Asn	Leu	Val	Asn	Leu	Asn	Phe	His	Gln	Ser	Leu	Thr
				185					190					195
Glu	Asp	Gln	Lys	Leu	Ile	Asp	Glu	Gly	Leu	Glu	Val	Asn	Leu	Asp
				200					205					210
Ser	Tyr	Ser	Lys	Pro	His	His	Pro	Lys	Trp	Lys	Lys	Lys	Val	Ala
				215					220					225
Ser	Ala	Leu	Gly	Ile	Gly	Ile	Ala	Ile	Gly	Val	Val	Gly	Gly	Val
				230					235					240
Leu	Val	Arg	Ile	Val	Leu	Cys	Ala	Leu	Arg	Gly	Gly	Leu	Gln	Gln
				245					250					255

<210> 539
 <211> 647
 <212> DNA
 <213> Homo Sapien

<400> 539
 gcgctcatca ctggctgggg acagagccgg gcaccaagga ggcacaggat 50
 cccgaagaga gagagagaag gcagcgaggg aaggaggacc ccggcaggca 100
 gcagcatgaa attcagccca gcgcactacc tgctgcctct cctgcctgcg 150
 ctggtcctca gcaccagaca ggactatgaa gagctagaaa agcagctgaa 200
 agaagtcttt aaggagcgaa gcaccattct tcgtcagctg acaaagacat 250
 caagagaact tgatggaatt aaagtcaatc ttcagtcctt aaaaaacgat 300
 gagcagtctg ccaaaaactga tgttcagaaa cttctggaat taggacagaa 350
 acaaagagaa gaaatgaagt ctcttcagga ggcctgcaa aatcagctta 400

aggagacatc agagaaagca gaaaaacacc aggctactat taatttttta 450
aagactgaag ttgaaagaaa gagcaaatg atccgagacc tccagaatga 500
ggattcaagg aagagaccaa gagatctcca gtggaagata gtctccatga 550
ggaccatgtc aatatactta ttgatgtatc tctagtacct agaatagtgg 600
agatttatat tagatacaaa ataaatatgt gtggaattaa ttaataa 647

<210> 540

<211> 159

<212> PRT

<213> Homo Sapien

<400> 540

Met	Lys	Phe	Ser	Pro	Ala	His	Tyr	Leu	Leu	Pro	Leu	Leu	Pro	Ala
1				5				10					15	
Leu	Val	Leu	Ser	Thr	Arg	Gln	Asp	Tyr	Glu	Glu	Leu	Glu	Lys	Gln
				20				25					30	
Leu	Lys	Glu	Val	Phe	Lys	Glu	Arg	Ser	Thr	Ile	Leu	Arg	Gln	Leu
				35				40					45	
Thr	Lys	Thr	Ser	Arg	Glu	Leu	Asp	Gly	Ile	Lys	Val	Asn	Leu	Gln
				50				55					60	
Ser	Leu	Lys	Asn	Asp	Glu	Gln	Ser	Ala	Lys	Thr	Asp	Val	Gln	Lys
				65				70					75	
Leu	Leu	Glu	Leu	Gly	Gln	Lys	Gln	Arg	Glu	Glu	Met	Lys	Ser	Leu
				80				85					90	
Gln	Glu	Ala	Leu	Gln	Asn	Gln	Leu	Lys	Glu	Thr	Ser	Glu	Lys	Ala
				95				100					105	
Glu	Lys	His	Gln	Ala	Thr	Ile	Asn	Phe	Leu	Lys	Thr	Glu	Val	Glu
				110				115					120	
Arg	Lys	Ser	Lys	Met	Ile	Arg	Asp	Leu	Gln	Asn	Glu	Asp	Ser	Arg
				125				130					135	
Lys	Arg	Pro	Arg	Asp	Leu	Gln	Trp	Lys	Ile	Val	Ser	Met	Arg	Thr
				140				145					150	
Met	Ser	Ile	Tyr	Leu	Leu	Met	Tyr	Leu						
				155										

<210> 541

<211> 906

<212> DNA

<213> Homo Sapien

<400> 541

ctccacgagg ctgccggctt aggacccccca gctccgacat gtcgccctct 50
gtcgcctgt gtcttctcac catcgttggc ctgattctcc ccaccagagg 100

acagacgttg aaagatacca cgtccagttc ttcagcagac tcaactatca 150
 tggacattca ggtcccgaca cgagccccag atgcagtcta cacagaactc 200
 cagcccacct ctccaacccc aacctggcct gctgatgaaa caccacaacc 250
 ccagacccag acccagcaac tggaaggaaac ggatgggcct ctagtgacag 300
 atccagagac acacaagagc accaaagcag ctcacccac tgatgacacc 350
 acgacgctct ctgagagacc atccccaagc acagacgtcc agacagacc 400
 ccagaccctc aagccatctg gttttcatga ggatgacccc ttcttctatg 450
 atgaacacac cctccggaaa cgggggctgt tggtcgcagc tgtgctgttc 500
 atcacaggca tcatcatcct caccagtggc aagtgcaggc agctgtcccg 550
 gttatgccgg aatcgttgca ggtgagtcca tcagaaacag gagctgacaa 600
 cctgctgggc acccgaagac caagccccct gccagctcac cgtgcccagc 650
 ctctgcac cctcgaaga gcctggccag agaggggaaga cacagatgat 700
 gaagctggag ccagggtgc cggtcagagt ctctacctc cccaaccct 750
 gccgccccct gaaggtacc tggcgcttg ggggctgtcc ctcaagttat 800
 ctctctgct aagacaaaaa gttaaagcact gtggtcttta aaaaaaaaaa 850
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 900
 aaaaaa 906

<210> 542
 <211> 178
 <212> PRT
 <213> Homo Sapien

<400> 542
 Met Ser Pro Ser Gly Arg Leu Cys Leu Leu Thr Ile Val Gly Leu
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 Ile Leu Pro Thr Arg Gly Gln Thr Leu Lys Asp Thr Thr Ser Ser
 20 25 30
 Ser Ser Ala Asp Ser Thr Ile Met Asp Ile Gln Val Pro Thr Arg
 35 40 45
 Ala Pro Asp Ala Val Tyr Thr Glu Leu Gln Pro Thr Ser Pro Thr
 50 55 60
 Pro Thr Trp Pro Ala Asp Glu Thr Pro Gln Pro Gln Thr Gln Thr
 65 70 75
 Gln Gln Leu Glu Gly Thr Asp Gly Pro Leu Val Thr Asp Pro Glu
 80 85 90

Thr	His	Lys	Ser	Thr	Lys	Ala	Ala	His	Pro	Thr	Asp	Asp	Thr	Thr
				95					100					105
Thr	Leu	Ser	Glu	Arg	Pro	Ser	Pro	Ser	Thr	Asp	Val	Gln	Thr	Asp
			110						115					120
Pro	Gln	Thr	Leu	Lys	Pro	Ser	Gly	Phe	His	Glu	Asp	Asp	Pro	Phe
			125						130					135
Phe	Tyr	Asp	Glu	His	Thr	Leu	Arg	Lys	Arg	Gly	Leu	Leu	Val	Ala
			140						145					150
Ala	Val	Leu	Phe	Ile	Thr	Gly	Ile	Ile	Ile	Leu	Thr	Ser	Gly	Lys
			155						160					165
Cys	Arg	Gln	Leu	Ser	Arg	Leu	Cys	Arg	Asn	Arg	Cys	Arg		
			170						175					

<210> 543
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<400> 543
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 tcagagcaaaa acctcctcta tctgcacatc ctggggacga accgggcagc 100
 cggagagctg cggccggccc agtcccgtc cgcccttgaa gggtaaaacc 150
 caaggcgggg ccttggttct ggcagaaggg acgctatgac cgcagaattc 200
 ctctccctgc tttgcctcgg gctgtgtctg ggctacgaag atgagaaaaa 250
 gaatgagaaa ccgccaagc cctccctcca cgccctggccc agctcgggtg 300
 ttgaagccga gagcaatgtg accctgaagt gtcaggctca ttcccagaat 350
 gtgacatttg tgctgcgcaa ggtgaacgac tctgggtaca agcaggaaca 400
 gagctcggca gaaaacgaag ctgaattccc cttcacggac ctgaagccta 450
 aggatgctgg gaggtacttt tgtgcctaca agacaacagc ctcccatgag 500
 tggtcagaaa gcagtgaaca cttgcagctg gtggtcacag ataaacacga 550
 tgaacttgaa gctccctcaa tgaaaacaga caccagaacc atctttgtcg 600
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 atctacagat gcagccagca cggttcatca tctgaggaat ccaccaagag 700
 aaccagccat tccaaacttc cggagcarga ggctgccgag gcagatttat 750
 ccaatatgga aagggtatct ctctcgacgg cagaccccca aggagtgacc 800
 tatgctgagc taagcaccag cgccctgtct gaggcagctt cagacaccac 850

ccaggagccc ccaggatctc atgaatatgc ggcactgaaa gtgtagcaag 900
aagacagccc tggccactaa aggagggggg atcgtgctgg ccaaggttat 950
cggaaatctg gagatgcaga tactgtgttt ccttgctctt cgtccatatc 1000
aataaaatta agtttctcgt ctta 1024

<210> 544
<211> 236
<212> PRT
<213> Homo Sapien

<400> 544
Met Thr Ala Glu Phe Leu Ser Leu Leu Cys Leu Gly Leu Cys Leu
1 5 10 15
Gly Tyr Glu Asp Glu Lys Lys Asn Glu Lys Pro Pro Lys Pro Ser
20 25 30
Leu His Ala Trp Pro Ser Ser Val Val Glu Ala Glu Ser Asn Val
35 40 45
Thr Leu Lys Cys Gln Ala His Ser Gln Asn Val Thr Phe Val Leu
50 55 60
Arg Lys Val Asn Asp Ser Gly Tyr Lys Gln Glu Gln Ser Ser Ala
65 70 75
Glu Asn Glu Ala Glu Phe Pro Phe Thr Asp Leu Lys Pro Lys Asp
80 85 90
Ala Gly Arg Tyr Phe Cys Ala Tyr Lys Thr Thr Ala Ser His Glu
95 100 105
Trp Ser Glu Ser Ser Glu His Leu Gln Leu Val Val Thr Asp Lys
110 115 120
His Asp Glu Leu Glu Ala Pro Ser Met Lys Thr Asp Thr Arg Thr
125 130 135
Ile Phe Val Ala Ile Phe Ser Cys Ile Ser Ile Leu Leu Leu Phe
140 145 150
Leu Ser Val Phe Ile Ile Tyr Arg Cys Ser Gln His Gly Ser Ser
155 160 165
Ser Glu Glu Ser Thr Lys Arg Thr Ser His Ser Lys Leu Pro Glu
170 175 180
Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu Arg Val Ser
185 190 195
Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu Leu Ser
200 205 210
Thr Ser Ala Leu Ser Glu Ala Ala Ser Asp Thr Thr Gln Glu Pro
215 220 225

Pro Gly Ser His Glu Tyr Ala Ala Leu Lys Val
 230 235

<210> 545
 <211> 1535
 <212> DNA
 <213> Homo Sapien

<400> 545
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 ctctcctgag tccagatgat gctcatacca atggcttcag tgatggcggt 150
 gactgaaccg aaatgggtct cggctctggag ccgcttcctc tgggtgacgc 200
 tgctgagcat ggtgctgggg tccctgctgg cctgctgct gccgctgggg 250
 gctgtggagg agcagtgctt ggctgtgctc aaaggcctct acctgctcag 300
 gagcaaaccg gacagggcgc agcatgccgc caccaagtgc accagcccgt 350
 ccacggagct cagcatcacc tccaggggag cgacgctgct ggtggccaag 400
 accaaggcct ctccagcggg taagttggaa gccagagctg cctgaacca 450
 ggccctggag atgaagcgcc agggcaagcg ggaaaaagcc caaaagctct 500
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 ctgagctctg cgcaggggtca tggaggagac ctactaccat cacatctacc 800
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 atcctggaga cccgctacgc cgtgcccggg aagagcctgg aggagcagaa 900
 cgaggtcata ggcatgcatg cagccatgaa gtacatcaac acgactctgg 950
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 agcagatgca ggagtttgta cagtggctca actccgagga agccatgaac 1150
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tcatcctcat gcaggcgggc taccgcgccca tcaccatccg caaggagcag 1300
 cggtcgcgact actaccacgt gttggaagct gccaacgagg gcgacgtgag 1350
 gccttttcatt cgcttcatcg ccaagtgtac tgagaccacc ctggacaccc 1400
 tgcttttttgc cacaactgag tactcggtgg cactgccaga agcccaaccc 1450
 aaccactctg ggttcaagga gacgcttcct gtgaagccct aaccctagaa 1500
 atcctcagtg acaaaggctg tcctgaggta ggaaa 1535

<210> 546
 <211> 458
 <212> PRT
 <213> Homo Sapien

<400> 546
 Met Met Leu Ile Pro Met Ala Ser Val Met Ala Val Thr Glu Pro
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 Lys Trp Val Ser Val Trp Ser Arg Phe Leu Trp Val Thr Leu Leu
 20 25 30
 Ser Met Val Leu Gly Ser Leu Leu Ala Leu Leu Leu Pro Leu Gly
 35 40 45
 Ala Val Glu Glu Gln Cys Leu Ala Val Leu Lys Gly Leu Tyr Leu
 50 55 60
 Leu Arg Ser Lys Pro Asp Arg Ala Gln His Ala Ala Thr Lys Cys
 65 70 75
 Thr Ser Pro Ser Thr Glu Leu Ser Ile Thr Ser Arg Gly Ala Thr
 80 85 90
 Leu Leu Val Ala Lys Thr Lys Ala Ser Pro Ala Gly Lys Leu Glu
 95 100 105
 Ala Arg Ala Ala Leu Asn Gln Ala Leu Glu Met Lys Arg Gln Gly
 110 115 120
 Lys Arg Glu Lys Ala Gln Lys Leu Phe Met His Ala Leu Lys Met
 125 130 135
 Asp Pro Asp Phe Val Asp Ala Leu Thr Glu Phe Gly Ile Phe Ser
 140 145 150
 Glu Glu Asp Lys Asp Ile Ile Gln Ala Asp Tyr Leu Tyr Thr Arg
 155 160 165
 Ala Leu Thr Ile Ser Pro Tyr His Glu Lys Ala Leu Val Asn Arg
 170 175 180
 Asp Arg Thr Leu Pro Leu Val Glu Glu Ile Asp Gln Arg Tyr Phe
 185 190 195
 Ser Ile Ile Asp Ser Lys Val Lys Lys Val Met Ser Ile Pro Lys

Gly Asn Ser Ala	Leu Arg Arg Val Met	Glu Glu Thr Tyr Tyr	His
215		220	225
His Ile Tyr His	Thr Val Ala Ile Glu	Gly Asn Thr Leu Thr	Leu
230		235	240
Ser Glu Ile Arg	His Ile Leu Glu Thr	Arg Tyr Ala Val Pro	Gly
245		250	255
Lys Ser Leu Glu	Glu Gln Asn Glu Val	Ile Gly Met His Ala	Ala
260		265	270
Met Lys Tyr Ile	Asn Thr Thr Leu Val	Ser Arg Ile Gly Ser	Val
275		280	285
Thr Ile Ser Asp	Val Leu Glu Ile His	Arg Arg Val Leu Gly	Tyr
290		295	300
Val Asp Pro Val	Glu Ala Gly Arg Phe	Arg Thr Thr Gln Val	Leu
305		310	315
Val Gly His His	Ile Pro Pro His Pro	Gln Asp Val Glu Lys	Gln
320		325	330
Met Gln Glu Phe	Val Gln Trp Leu Asn	Ser Glu Glu Ala Met	Asn
335		340	345
Leu His Pro Val	Glu Phe Ala Ala Leu	Ala His Tyr Lys Leu	Val
350		355	360
Tyr Ile His Pro	Phe Ile Asp Gly Asn	Gly Arg Thr Ser Arg	Leu
365		370	375
Leu Met Asn Leu	Ile Leu Met Gln Ala	Gly Tyr Pro Pro Ile	Thr
380		385	390
Ile Arg Lys Glu	Gln Arg Ser Asp Tyr	Tyr His Val Leu Glu	Ala
395		400	405
Ala Asn Glu Gly	Asp Val Arg Pro Phe	Ile Arg Phe Ile Ala	Lys
410		415	420
Cys Thr Glu Thr	Thr Leu Asp Thr Leu	Leu Phe Ala Thr Thr	Glu
425		430	435
Tyr Ser Val Ala	Leu Pro Glu Ala Gln	Pro Asn His Ser Gly	Phe
440		445	450
Lys Glu Thr Leu	Pro Val Lys Pro		
455			

<210> 547
 <211> 1863
 <212> DNA
 <213> Homo Sapien

<400> 547

cctctgtctg tgctcccatc ccagggagta taggtggagc ctccagagcc 50
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caccctggg atccccactg agctggccta cttcagacag ccagggccca 150
cccccttggc ccccttagtg tccagctcgt ggccccttgg catttccaca 200
agacgccaaag atggagattc ccatggggac ccagggctgc ttctcaaaga 250
gcctcctgct ctcagcctca atcctgggtcc tctggatgct ccaaggctcc 300
caggcagctc tctacatcca gaagattcca gagcagcctc aaaagaacca 350
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actggtacct gggggaggag acgtacggag gcacgaggct atttacctac 450
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ctacagacag tggcacctac caagtagcca ttaccatcaa ctctgaatgg 600
actatgaagg ccaagactga ggtccaggta gctgaaaaga ataaggagct 650
gcccagtaca cacctgcccc ccaacgctgg gatcctggcg gccaccatca 700
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gggccaggga tctctgtcca tcttgtgctc ggctgtatcc ccagtgcctt 850
cagtgcgcc cagcacatgg atggcgacca cagagaagcc agaattgggc 900
cctgctcatg atgctggtga caacaacatc tatgaagtga tgccctctcc 950
agtcctcctg gtgtcccca tcagtgcac acaggtccata aaccagccc 1000
ggccctgccc cacaccccca cacctgcagg cggagccaga gaaccaccag 1050
taccagcagg acctgctaaa ccccgaccct gcccctact gccagctggt 1100
gccaaacttc tgatgggtcc tgggccaggc cagccaggga gaagacaagg 1150
cccagccct cctctgggag cctcacacct gagaccagca ggacaaggcc 1200
attgggggct gtggggccga tgaggtggac tcagccaaag actcagcagc 1250
acatggggca ggtgtcctgg cagggggaca ggagactgta acaggcccag 1300
gtccttgtgc agcccctgaa tgcacgccc ccttcggtct gttccttcaa 1350
gcaagctggc ctggggccatg tgctgtgaa aggcaggctc tggccccttt 1400
ccatgccaaa gtccccaag atctggatat ctggggacaa gatggtggcc 1450

tcaggcctgc ctcccaggca gttggctggg ctcccaactg tctgtcctca 1500
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acaaggcaga caccacacca tgcgggcctc aggtggcaga gaggcccagc 1600
ctcacaggcc tgtggcccca cacaccagtc ccagcaaggt gaccacggct 1650
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gccagctgct ggtcttggcc cccaccctga atcttactga gtccctctgg 1750
gcagcagctc ctttctccac cccaccccag caccgtccc aaatgtggcc 1800
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agcctttgct gca 1863

<210> 548

<211> 300

<212> PRT

<213> Homo Sapien

<400> 548

Met	Glu	Ile	Pro	Met	Gly	Thr	Gln	Gly	Cys	Phe	Ser	Lys	Ser	Leu
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Leu	Leu	Ser	Ala	Ser	Ile	Leu	Val	Leu	Trp	Met	Leu	Gln	Gly	Ser
				20					25					30
Gln	Ala	Ala	Leu	Tyr	Ile	Gln	Lys	Ile	Pro	Glu	Gln	Pro	Gln	Lys
				35					40					45
Asn	Gln	Asp	Leu	Leu	Leu	Ser	Val	Gln	Gly	Val	Pro	Asp	Thr	Phe
				50					55					60
Gln	Asp	Phe	Asn	Trp	Tyr	Leu	Gly	Glu	Glu	Thr	Tyr	Gly	Gly	Thr
				65					70					75
Arg	Leu	Phe	Thr	Tyr	Ile	Pro	Gly	Ile	Gln	Arg	Pro	Gln	Arg	Asp
				80					85					90
Gly	Ser	Ala	Met	Gly	Gln	Arg	Asp	Ile	Val	Gly	Phe	Pro	Asn	Gly
				95					100					105
Ser	Met	Leu	Leu	Arg	Arg	Ala	Gln	Pro	Thr	Asp	Ser	Gly	Thr	Tyr
				110					115					120
Gln	Val	Ala	Ile	Thr	Ile	Asn	Ser	Glu	Trp	Thr	Met	Lys	Ala	Lys
				125					130					135
Thr	Glu	Val	Gln	Val	Ala	Glu	Lys	Asn	Lys	Glu	Leu	Pro	Ser	Thr
				140					145					150
His	Leu	Pro	Thr	Asn	Ala	Gly	Ile	Leu	Ala	Ala	Thr	Ile	Ile	Gly
				155					160					165
Ser	Leu	Ala	Ala	Gly	Ala	Leu	Leu	Ile	Ser	Cys	Ile	Ala	Tyr	Leu

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 ttctaactgg gaa 2213

<210> 550
 <211> 104
 <212> PRT
 <213> Homo Sapien

<400> 550
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 Gly Val Leu Leu Ala Pro Asp Gly Arg Glu Met Pro Gly Val Leu
 20 25 30
 Leu His Thr Leu Trp Asp Thr Ala Gln Tyr Thr Trp Pro Val Ser
 35 40 45
 Pro Thr Ala Arg Ala Gly Pro Gly Gln Ala Trp Ser Leu Arg Cys
 50 55 60
 Val Leu Val Gly Ile Leu His Ser Asp Arg Arg Cys Ala Leu Pro
 65 70 75
 Thr Phe Pro His Ser Ser Phe Ala Cys Gly Ala His Pro Phe Ala
 80 85 90
 Glu Ser Ser Phe Pro Cys Gly Leu Trp Pro Ala Glu Val Lys
 95 100

<210> 551
 <211> 3141
 <212> DNA
 <213> Homo Sapien

<400> 551
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 gccttctctac cctgtgagct ccagccccac ggcttggtga actgcaactg 150
 gctgttcttg aagtctgtgc cccacttctc catggcagca ccccgaggca 200
 atgtcaccag cctttccttg tcttccaacc gcatccacca cctccatgat 250
 tctgactttg cccacctgcc cagcctgcgg catctcaacc tcaagtggaa 300
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 aagaacccct gcaggcaggc actggagggtg gccccgggtg cctcccttgg 600
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20	25	30
Ala Phe Leu Pro Cys Glu Leu Gln Pro His Gly Leu Val Asn Cys		
35	40	45
Asn Trp Leu Phe Leu Lys Ser Val Pro His Phe Ser Met Ala Ala		
50	55	60
Pro Arg Gly Asn Val Thr Ser Leu Ser Leu Ser Ser Asn Arg Ile		
65	70	75
His His Leu His Asp Ser Asp Phe Ala His Leu Pro Ser Leu Arg		
80	85	90
His Leu Asn Leu Lys Trp Asn Cys Pro Pro Val Gly Leu Ser Pro		
95	100	105
Met His Phe Pro Cys His Met Thr Ile Glu Pro Ser Thr Phe Leu		
110	115	120
Ala Val Pro Thr Leu Glu Glu Leu Asn Leu Ser Tyr Asn Asn Ile		
125	130	135
Met Thr Val Pro Ala Leu Pro Lys Ser Leu Ile Ser Leu Ser Leu		
140	145	150
Ser His Thr Asn Ile Leu Met Leu Asp Ser Ala Ser Leu Ala Gly		
155	160	165
Leu His Ala Leu Arg Phe Leu Phe Met Asp Gly Asn Cys Tyr Tyr		
170	175	180
Lys Asn Pro Cys Arg Gln Ala Leu Glu Val Ala Pro Gly Ala Leu		
185	190	195
Leu Gly Leu Gly Ser Leu Thr His Leu Ser Leu Lys Tyr Asn Asn		
200	205	210
Leu Thr Val Val Pro Arg Asn Leu Pro Ser Ser Leu Glu Tyr Leu		
215	220	225
Leu Leu Ser Tyr Asn Arg Ile Val Lys Leu Ala Pro Glu Asp Leu		
230	235	240
Ala Asn Leu Thr Ala Leu Arg Val Leu Asp Val Gly Gly Asn Cys		
245	250	255
Arg Arg Cys Asp His Ala Pro Asn Pro Cys Met Glu Cys Pro Arg		
260	265	270
His Phe Pro Gln Leu His Pro Asp Thr Phe Ser His Leu Ser Arg		
275	280	285
Leu Glu Gly Leu Val Leu Lys Asp Ser Ser Leu Ser Trp Leu Asn		
290	295	300
Ala Ser Trp Phe Arg Gly Leu Gly Asn Leu Arg Val Leu Asp Leu		
305	310	315

605	610	615
Glu Gly Asp Leu Tyr Leu His Phe Phe	Gln Gly Leu Ser Gly Leu	
620	625	630
Ile Trp Leu Asp Leu Ser Gln Asn Arg	Leu His Thr Leu Leu Pro	
635	640	645
Gln Thr Leu Arg Asn Leu Pro Lys Ser	Leu Gln Val Leu Arg Leu	
650	655	660
Arg Asp Asn Tyr Leu Ala Phe Phe Lys	Trp Trp Ser Leu His Phe	
665	670	675
Leu Pro Lys Leu Glu Val Leu Asp Leu	Ala Gly Asn Gln Leu Lys	
680	685	690
Ala Leu Thr Asn Gly Ser Leu Pro Ala	Gly Thr Arg Leu Arg Arg	
695	700	705
Leu Asp Val Ser Cys Asn Ser Ile Ser	Phe Val Ala Pro Gly Phe	
710	715	720
Phe Ser Lys Ala Lys Glu Leu Arg Glu	Leu Asn Leu Ser Ala Asn	
725	730	735
Ala Leu Lys Thr Val Asp His Ser Trp	Phe Gly Pro Leu Ala Ser	
740	745	750
Ala Leu Gln Ile Leu Asp Val Ser Ala	Asn Pro Leu His Cys Ala	
755	760	765
Cys Gly Ala Ala Phe Met Asp Phe Leu	Leu Glu Val Gln Ala Ala	
770	775	780
Val Pro Gly Leu Pro Ser Arg Val Lys	Cys Gly Ser Pro Gly Gln	
785	790	795
Leu Gln Gly Leu Ser Ile Phe Ala Gln	Asp Leu Arg Leu Cys Leu	
800	805	810
Asp Glu Ala Leu Ser Trp Asp Cys Phe	Ala Leu Ser Leu Leu Ala	
815	820	825
Val Ala Leu Gly Leu Gly Val Pro Met	Leu His His Leu Cys Gly	
830	835	840
Trp Asp Leu Trp Tyr Cys Phe His Leu	Cys Leu Ala Trp Leu Pro	
845	850	855
Trp Arg Gly Arg Gln Ser Gly Arg Asp	Glu Asp Ala Leu Pro Tyr	
860	865	870
Asp Ala Phe Val Val Phe Asp Lys Thr	Gln Ser Ala Val Ala Asp	
875	880	885
Trp Val Tyr Asn Glu Leu Arg Gly Gln	Leu Glu Glu Cys Arg Gly	
890	895	900

Arg Trp Ala Leu Arg Leu Cys Leu Glu Glu Arg Asp Trp Leu Pro
905 910 915

Gly Lys Thr Leu Phe Glu Asn Leu Trp Ala Ser Val Tyr Gly Ser
920 925 930

Arg Lys Thr Leu Phe Val Leu Ala His Thr Asp Arg Val Ser Gly
935 940 945

Leu Leu Arg Ala Ser Phe Leu Leu Ala Gln Gln Arg Leu Leu Glu
950 955 960

Asp Arg Lys Asp Val Val Val Leu Val Ile Leu Ser Pro Asp Gly
965 970 975

Arg Arg Ser Arg Tyr Val Arg Leu Arg Gln Arg Leu Cys Arg Gln
980 985 990

Ser Val Leu Leu Trp Pro His Gln Pro Ser Gly Gln Arg Ser Phe
995 1000 1005

Trp Ala Gln Leu Gly Met Ala Leu Thr Arg Asp Asn His His Phe
1010 1015 1020

Tyr Asn Arg Asn Phe Cys Gln Gly Pro Thr Ala Glu
1025 1030

<210> 553
<211> 1234
<212> DNA
<213> Homo Sapien

<400> 553
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gccactcctg ggtcagacgg tgaggtcggc gtctgcgagg acgcggcggt 150
ggagtagaag ggcagccgga gacaggcccg gcgccccttc cgaggctaga 200
cggccccagc ttcgcgggga tcatggcatt gctgggtggac cgagtgcggg 250
gccactggcg aatcgccgcc gggtcctgt tcaacctgct ggtgtccatc 300
tgcatttgtt tcctcaacaa atggatttat gtgtaccacg gcttccocaa 350
catgagcctg acctggtgc acttcgtggt cacctggtg ggcttgata 400
tctgccagaa gctggacatc ttgccccca aaagtctgcc gccctccagg 450
ctctctctcc tggccctcag cttctgtggc tttgtggtct tcaactaacct 500
ttctctgcag aacaacacca taggcaccta tcagctggcc aaggccatga 550
ccacgccggt gatcatagcc atccagacct tctgctacca gaaaaccttc 600
tccaccagaa tccagctcac gctgattcct ataactttag gtgtaatcct 650

aaattcttat tacgatgtga agtttaattt ccttggaatg gtgtttgctg 700
 ctcttggtgt tttagttaca tccctttatc aagtgtgggt aggagccaaa 750
 cagcatgaat tacaagtga ctcaatgcag ctgctgtact accaggctcc 800
 gatgtcatct gccatgttgc tggttgctgt gcccttcttt gagccagtgt 850
 ttggagaagg aggaatattt ggtccctggt cagtttctgc tttgcttatg 900
 gtgctgctat ctggagtaat agctttcatg gtgaacttat caatttattg 950
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 agttctgcat tactttattc ggaggatatg ttttatttaa ggatccactg 1050
 tccattaatc aggccttgg cattttatgt acattatttg gcattctcgc 1100
 ctatacccac tttaaagtca gtgaacagga aggaagtagg agtaaactgg 1150
 cacaacgtcc ttaattgggt ttttgtggag aaaagaatgt tgtccaaga 1200
 agataaaaaa tattgttaag tgtgcaagtt atta 1234

<210> 554
 <211> 313
 <212> PRT
 <213> Homo Sapien

<400> 554
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 Ala Gly Leu Leu Phe Asn Leu Leu Val Ser Ile Cys Ile Val Phe
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 Leu Asn Lys Trp Ile Tyr Val Tyr His Gly Phe Pro Asn Met Ser
 35 40 45
 Leu Thr Leu Val His Phe Val Val Thr Trp Leu Gly Leu Tyr Ile
 50 55 60
 Cys Gln Lys Leu Asp Ile Phe Ala Pro Lys Ser Leu Pro Pro Ser
 65 70 75
 Arg Leu Leu Leu Leu Ala Leu Ser Phe Cys Gly Phe Val Val Phe
 80 85 90
 Thr Asn Leu Ser Leu Gln Asn Asn Thr Ile Gly Thr Tyr Gln Leu
 95 100 105
 Ala Lys Ala Met Thr Thr Pro Val Ile Ile Ala Ile Gln Thr Phe
 110 115 120
 Cys Tyr Gln Lys Thr Phe Ser Thr Arg Ile Gln Leu Thr Leu Ile
 125 130 135
 Pro Ile Thr Leu Gly Val Ile Leu Asn Ser Tyr Tyr Asp Val Lys

140	145	150
Phe Asn Phe Leu Gly Met Val Phe Ala	Ala Leu Gly Val Leu Val	
155	160	165
Thr Ser Leu Tyr Gln Val Trp Val Gly	Ala Lys Gln His Glu Leu	
170	175	180
Gln Val Asn Ser Met Gln Leu Leu Tyr	Tyr Gln Ala Pro Met Ser	
185	190	195
Ser Ala Met Leu Leu Val Ala Val Pro	Phe Phe Glu Pro Val Phe	
200	205	210
Gly Glu Gly Gly Ile Phe Gly Pro Trp	Ser Val Ser Ala Leu Leu	
215	220	225
Met Val Leu Leu Ser Gly Val Ile Ala	Phe Met Val Asn Leu Ser	
230	235	240
Ile Tyr Trp Ile Ile Gly Asn Thr Ser	Pro Val Thr Tyr Asn Met	
245	250	255
Phe Gly His Phe Lys Phe Cys Ile Thr	Leu Phe Gly Gly Tyr Val	
260	265	270
Leu Phe Lys Asp Pro Leu Ser Ile Asn	Gln Ala Leu Gly Ile Leu	
275	280	285
Cys Thr Leu Phe Gly Ile Leu Ala Tyr	Thr His Phe Lys Leu Ser	
290	295	300
Glu Gln Glu Gly Ser Arg Ser Lys Leu	Ala Gln Arg Pro	
305	310	

<210> 555
 <211> 1773
 <212> DNA
 <213> Homo Sapien

<400> 555
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 accaacctga aagcaggaat gtaagcactg ttcacagaga ttttcgtctt 100
 tggcttattg tgctgcaga gtctagtgtt tctttgccag ctgtgctgac 150
 tcagcactcc atgctgtgtt tctggaacca gtccttgag ctgggccatg 200
 ttttgattga cagtgtggag ctagccagc aagtactcta catgcaaccc 250
 cccaccagg cactacctt gctcctctc catggcctcc tgctacaccg 300
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 tgactctaac ccaggttctt cagacccaag accagctgtg ggcaagtctt 400
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gggtcctctg ggggacactg aggacagga ggccttgatt agcctcacac 500
 aagcctgcct gagccccagt agtgggagct ggggccagcc acacacacct 550
 cagtctttgc tggccacgct catgcccctc ccagctaagg gagctggatg 600
 caatggcaga gtgcaaggcc cagatgcacc tactgccctc accacctgaa 650
 ccccggtctc gcggactgag tgagggcccc caagcctggc tgttgcgacg 700
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 cgcctagtgc aagtcaaccg gaggctggag tcaactgcagg atctgctgac 850
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 gcagctgaag ggccgacccc cgtgccctc ccgccgctgt gctgcgggtg 1050
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 ccggccggtc cgcagccgcc ctggcaactg ctgcgacagt tgtcgcccg 1150
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 ctgctgctgg cattgcgtgg ggaagctgcc ctggaccaga atgtgcccag 1300
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 tgtgtacatg ggagggcccc ttggcaccgc taagctgcag agcaggaaca 1650
 tcgtgatgca tctgccttta cccaccaagc tcacccccaa cacctgtgtc 1700
 caaaggaggg tccatgtgtg cagcccaccc ctgtcttgag cccgtctacc 1750
 aaaataaagt tgtagtgatt cca 1773

<210> 556

<211> 162

<212> PRT

<213> Homo Sapien

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 aatgccgttc acctcgcagt gaggggggat gaaggataag cccattggtg 600
 ggcagaatgt cttctaatta catgggttatt ttcagaatth atttgttgag 650
 gaagagggtt gagaggttag gttcgaccat tcgtgagtct gtgttcata 700
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 gattgctgtc aggataagag catctcttca gccaggaggg aggcctgttc 850
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 ggaacattta atcaggagat gctctcaatg actaatttgt ctaagtctta 1000
 ggaaggaggt tgaggaaagc tggatttaga caagttcaat ttagggagtt 1050
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 aaatgtatct caattgtgca gaagtgagct gtccaaaagt ataagactaa 1150
 gtgataaact gtcttccac cgtgggagtt gttaatgaga aagaaagtgt 1200
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<210> 558
 <211> 159
 <212> PRT
 <213> Homo Sapien

<400> 558
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 Ala Arg Ala Leu Leu Leu Arg Ser Arg Val Val Arg Pro Ala Tyr
 20 25 30
 Val Ser Ala Phe Leu Gln Asp Gln Pro Thr Gln Gly Arg Cys Gly
 35 40 45
 Thr Gln His Ile His Leu Ser Pro Ser His His Ser Gly Ser Lys
 50 55 60
 Ala Ala Ser Leu His Trp Thr Ser Glu Arg Val Val Ser Val Leu
 65 70 75
 Leu Leu Gly Leu Ile Pro Ala Gly Tyr Leu Asn Pro Cys Ser Val
 80 85 90
 Val Asp Tyr Ser Leu Ala Ala Ala Leu Thr Leu His Ser His Trp
 95 100 105

Gly	Leu	Gly	Gln	Val	Val	Thr	Asp	Tyr	Val	His	Gly	Asp	Thr	Leu
				110					115					120
Pro	Lys	Ala	Ala	Arg	Ala	Gly	Leu	Leu	Ala	Leu	Ser	Ala	Leu	Thr
				125					130					135
Phe	Ala	Gly	Leu	Cys	Tyr	Phe	Asn	Tyr	His	Asp	Val	Gly	Ile	Cys
				140					145					150
Arg	Ala	Val	Ala	Met	Leu	Trp	Lys	Leu						
				155										

<210> 559
 <211> 2473
 <212> DNA
 <213> Homo Sapien

<400> 559
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 atgcgccccg cgcagccgcc tgcgcctgcg ggagccggct gcccttgaga 100
 tggagtgtct gcctcttttg ctctgcctgg gttttcactt cctgaccgtg 150
 ggctggagga acagaagcgg aacagccaca gcagcctccc aaggagtctg 200
 caagttggtg ggtggagccg ctgactgccg agggcagagc ctcgcttcgg 250
 tgcccagcag cctcccgccc cacgcccgga tgctcaccct ggatgccaac 300
 cctctcaaga ccctgtggaa tcactccctc cagccttacc ctctcctgga 350
 gaggctcagc ctgcacagct gccacctgga gcgcattcagc cgcgggcgct 400
 tccaggagca aggtcacctg cgcagcctgg tccctggggga caactgcctc 450
 tcagagaact acgaagagac ggcagccgcc ctccacgccc tgccgggcct 500
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 accatcatgc ggctggacga ctccgtcttc gagggcctgg agcgtctccg 650
 ggagctggat ctgcagagga actacatctt cgagatcgag ggcgggcgctt 700
 tcgacggcct ggctgagctg aggcacctca acctggcctt caacaacctc 750
 ccctgcatcg tggacttcg gctcacgcgg ctgcgggtcc tcaacgtcag 800
 ctacaacgtc ctggagtgg tctcgcgac cgggggagag gctgccttcg 850
 agctggagac gctggacctg tctcacaacc agctgctgtt cttcccgtg 900
 ctgccccagt acagcaagtt gcggaccctc ctgctgcgcg acaacaacat 950
 gggcttctac cgggacctgt acaacacctc gtcgccgagg gagatggtgg 1000

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<210> 560

<211> 692

<212> PRT

<213> Homo Sapien

<400> 560

Met Glu Leu Leu Pro Leu Trp Leu Cys Leu Gly Phe His Phe Leu
1 5 10 15

Thr Val Gly Trp Arg Asn Arg Ser Gly Thr Ala Thr Ala Ala Ser
20 25 30

Gln Gly Val Cys Lys Leu Val Gly Gly Ala Ala Asp Cys Arg Gly
35 40 45

Gln Ser Leu Ala Ser Val Pro Ser Ser Leu Pro Pro His Ala Arg
50 55 60

Met Leu Thr Leu Asp Ala Asn Pro Leu Lys Thr Leu Trp Asn His
65 70 75

Ser Leu Gln Pro Tyr Pro Leu Leu Glu Ser Leu Ser Leu His Ser
80 85 90

Cys His Leu Glu Arg Ile Ser Arg Gly Ala Phe Gln Glu Gln Gly
95 100 105

His Leu Arg Ser Leu Val Leu Gly Asp Asn Cys Leu Ser Glu Asn
110 115 120

Tyr Glu Glu Thr Ala Ala Ala Leu His Ala Leu Pro Gly Leu Arg
125 130 135

Arg Leu Asp Leu Ser Gly Asn Ala Leu Thr Glu Asp Met Ala Ala
140 145 150

Leu Met Leu Gln Asn Leu Ser Ser Leu Arg Ser Val Ser Leu Ala
155 160 165

Gly Asn Thr Ile Met Arg Leu Asp Asp Ser Val Phe Glu Gly Leu
170 175 180

Glu Arg Leu Arg Glu Leu Asp Leu Gln Arg Asn Tyr Ile Phe Glu
185 190 195

Ile Glu Gly Gly Ala Phe Asp Gly Leu Ala Glu Leu Arg His Leu
200 205 210

Asn Leu Ala Phe Asn Asn Leu Pro Cys Ile Val Asp Phe Gly Leu
215 220 225

Thr Arg Leu Arg Val Leu Asn Val Ser Tyr Asn Val Leu Glu Trp
230 235 240

Phe Leu Ala Thr Gly Gly Glu Ala Ala Phe Glu Leu Glu Thr Leu
245 250 255

Asp	Leu	Ser	His	Asn	Gln	Leu	Leu	Phe	Phe	Pro	Leu	Leu	Pro	Gln	
				260					265					270	
Tyr	Ser	Lys	Leu	Arg	Thr	Leu	Leu	Leu	Arg	Asp	Asn	Asn	Met	Gly	
				275					280					285	
Phe	Tyr	Arg	Asp	Leu	Tyr	Asn	Thr	Ser	Ser	Pro	Arg	Glu	Met	Val	
				290					295					300	
Ala	Gln	Phe	Leu	Leu	Val	Asp	Gly	Asn	Val	Thr	Asn	Ile	Thr	Thr	
				305					310					315	
Val	Ser	Leu	Trp	Glu	Glu	Phe	Ser	Ser	Ser	Asp	Leu	Ala	Asp	Leu	
				320					325					330	
Arg	Phe	Leu	Asp	Met	Ser	Gln	Asn	Gln	Phe	Gln	Tyr	Leu	Pro	Asp	
				335					340					345	
Gly	Phe	Leu	Arg	Lys	Met	Pro	Ser	Leu	Ser	His	Leu	Asn	Leu	His	
				350					355					360	
Gln	Asn	Cys	Leu	Met	Thr	Leu	His	Ile	Arg	Glu	His	Glu	Pro	Pro	
				365					370					375	
Gly	Ala	Leu	Thr	Glu	Leu	Asp	Leu	Ser	His	Asn	Gln	Leu	Ser	Glu	
				380					385					390	
Leu	His	Leu	Ala	Pro	Gly	Leu	Ala	Ser	Cys	Leu	Gly	Ser	Leu	Arg	
				395					400					405	
Leu	Phe	Asn	Leu	Ser	Ser	Asn	Gln	Leu	Leu	Gly	Val	Pro	Pro	Gly	
				410					415					420	
Leu	Phe	Ala	Asn	Ala	Arg	Asn	Ile	Thr	Thr	Leu	Asp	Met	Ser	His	
				425					430					435	
Asn	Gln	Ile	Ser	Leu	Cys	Pro	Leu	Pro	Ala	Ala	Ser	Asp	Arg	Val	
				440					445					450	
Gly	Pro	Pro	Ser	Cys	Val	Asp	Phe	Arg	Asn	Met	Ala	Ser	Leu	Arg	
				455					460					465	
Ser	Leu	Ser	Leu	Glu	Gly	Cys	Gly	Leu	Gly	Ala	Leu	Pro	Asp	Cys	
				470					475					480	
Pro	Phe	Gln	Gly	Thr	Ser	Leu	Thr	Tyr	Leu	Asp	Leu	Ser	Ser	Asn	
				485					490					495	
Trp	Gly	Val	Leu	Asn	Gly	Ser	Leu	Ala	Pro	Leu	Gln	Asp	Val	Ala	
				500					505					510	
Pro	Met	Leu	Gln	Val	Leu	Ser	Leu	Arg	Asn	Met	Gly	Leu	His	Ser	
				515					520					525	
Ser	Phe	Met	Ala	Leu	Asp	Phe	Ser	Gly	Phe	Gly	Asn	Leu	Arg	Asp	
				530					535					540	
Leu	Asp	Leu	Ser	Gly	Asn	Cys	Leu	Thr	Thr	Phe	Pro	Arg	Phe	Gly	

20050301 09:50:00

545	550	555
Gly Ser Leu Ala Leu Glu Thr Leu Asp	Leu Arg Arg Asn Ser Leu	
560	565	570
Thr Ala Leu Pro Gln Lys Ala Val Ser	Glu Gln Leu Ser Arg Gly	
575	580	585
Leu Arg Thr Ile Tyr Leu Ser Gln Asn	Pro Tyr Asp Cys Cys Gly	
590	595	600
Val Asp Gly Trp Gly Ala Leu Gln His	Gly Gln Thr Val Ala Asp	
605	610	615
Trp Ala Met Val Thr Cys Asn Leu Ser	Ser Lys Ile Ile Arg Val	
620	625	630
Thr Glu Leu Pro Gly Gly Val Pro Arg	Asp Cys Lys Trp Glu Arg	
635	640	645
Leu Asp Leu Gly Leu Leu Tyr Leu Val	Leu Ile Leu Pro Ser Cys	
650	655	660
Leu Thr Leu Leu Val Ala Cys Thr Val	Ile Val Leu Thr Phe Lys	
665	670	675
Lys Pro Leu Leu Gln Val Ile Lys Ser	Arg Cys His Trp Ser Ser	
680	685	690
Val Tyr		

<210> 561
<211> 1060
<212> DNA
<213> Homo Sapien

<400> 561
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ctggggggcg tctggtgggt cccggggccag tcggatctca gccacggacg 150
gcgttttctg gacctcaaag tgtgcgggga cgaagagtgc agcatgttaa 200
tgtaccgtgg gaaagctctt gaagacttca cgggccctga ttgtcgtttt 250
gtgaatttta aaaaagggtga cgatgtatat gtctactaca aactggcagg 300
gggatccctt gaactttggg ctggaagtgt tgaacacagt tttggatatt 350
ttccaaaaga tttgatcaag gtacttcata aatacacgga agaagagcta 400
catattccag cagatgagac agactttgtc tgctttgaag gaggaagaga 450
tgattttaat agttataatg tagaagagct ttaggatct ttggaactgg 500

aggactctgt acctgaagag tcgaagaaag ctgaagaagt ttctcagcac 550
 agagagaaat ctctgagga gtctcggggg cgtgaacttg accctgtgcc 600
 tgagcccgag gcattcagag ctgattcaga ggatggagaa ggtgctttct 650
 cagagagcac cgaggggctg cagggacagc cctcagctca ggagagccac 700
 cctcacacca gcggctctgc ggctaacgct cagggagtgc agtcttcgtt 750
 ggacactttt gaagaaattc tgcacgataa attgaaagtg ccgggaagcg 800
 aaagcagaac tggcaatagt tctcctgcct cgggtggagcg ggagaagaca 850
 gatgcttaca aagtcttgaa aacagaaatg agtcagagag gaagtggaca 900
 gtgcggttatt cattacagca aaggatttcg ttggcatcaa aatctaagtt 950
 tgtttttacaa agattgtttt tagtactaag ctgccttggc agtttgcatt 1000
 tttgagccaa acaaaaatat attattttcc cttctaagta aaaaaaaaaa 1050
 aaaaaaaaaa 1060

<210> 562
 <211> 303
 <212> PRT
 <213> Homo Sapien

<400> 562
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 1 5 10 15
 Ala Leu Trp Trp Val Pro Gly Gln Ser Asp Leu Ser His Gly Arg
 20 25 30
 Arg Phe Ser Asp Leu Lys Val Cys Gly Asp Glu Glu Cys Ser Met
 35 40 45
 Leu Met Tyr Arg Gly Lys Ala Leu Glu Asp Phe Thr Gly Pro Asp
 50 55 60
 Cys Arg Phe Val Asn Phe Lys Lys Gly Asp Asp Val Tyr Val Tyr
 65 70 75
 Tyr Lys Leu Ala Gly Gly Ser Leu Glu Leu Trp Ala Gly Ser Val
 80 85 90
 Glu His Ser Phe Gly Tyr Phe Pro Lys Asp Leu Ile Lys Val Leu
 95 100 105
 His Lys Tyr Thr Glu Glu Glu Leu His Ile Pro Ala Asp Glu Thr
 110 115 120
 Asp Phe Val Cys Phe Glu Gly Gly Arg Asp Asp Phe Asn Ser Tyr
 125 130 135
 Asn Val Glu Glu Leu Leu Gly Ser Leu Glu Leu Glu Asp Ser Val

Pro	Glu	Glu	Ser	Lys	Lys	Ala	Glu	Glu	Val	Ser	Gln	His	Arg	Glu	140	145	150
				155					160					165			
Lys	Ser	Pro	Glu	Glu	Ser	Arg	Gly	Arg	Glu	Leu	Asp	Pro	Val	Pro	170	175	180
Glu	Pro	Glu	Ala	Phe	Arg	Ala	Asp	Ser	Glu	Asp	Gly	Glu	Gly	Ala	185	190	195
Phe	Ser	Glu	Ser	Thr	Glu	Gly	Leu	Gln	Gly	Gln	Pro	Ser	Ala	Gln	200	205	210
Glu	Ser	His	Pro	His	Thr	Ser	Gly	Pro	Ala	Ala	Asn	Ala	Gln	Gly	215	220	225
Val	Gln	Ser	Ser	Leu	Asp	Thr	Phe	Glu	Glu	Ile	Leu	His	Asp	Lys	230	235	240
Leu	Lys	Val	Pro	Gly	Ser	Glu	Ser	Arg	Thr	Gly	Asn	Ser	Ser	Pro	245	250	255
Ala	Ser	Val	Glu	Arg	Glu	Lys	Thr	Asp	Ala	Tyr	Lys	Val	Leu	Lys	260	265	270
Thr	Glu	Met	Ser	Gln	Arg	Gly	Ser	Gly	Gln	Cys	Val	Ile	His	Tyr	275	280	285
Ser	Lys	Gly	Phe	Arg	Trp	His	Gln	Asn	Leu	Ser	Leu	Phe	Tyr	Lys	290	295	300
Asp Cys Phe																	

<210> 563
 <211> 824
 <212> DNA
 <213> Homo Sapien

<400> 563
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 gagcccgatt acaaggatat ttacctgctc ctaccctgat ctagggacga 150
 ggatgggaag accgcctgtg gccatgagcc ctccccggtg ctctgggggc 200
 taaggctggg gctgcagcca tggggctggg tcagcccag gcctggttgc 250
 tgggtctgcc cacagctgtg gtctatggct ccttggtctt cttcaccacc 300
 atcctgcaca atgtcttcct gctctactat gtggacacct ttgtctcagt 350
 gtacaagatc aacaaaatgg cttcttgggt cggagagaca gtgtttctcc 400
 tctggaacag cctcaatgac cctctcttcg gttggctcag tgaccggcag 450

ttctctcagct cccagccccg cctgtgtgga gaggagctgc ttgtgggcag 500
 tgaggaggcg gacagcatca ccttgggccc gtatctccgg cagctggcac 550
 gccatcgga cttctgtggg ttctgtgagca tggacctggt gcaggtgcag 600
 tggctcacgc ctgtaatccc agcacttcgg gacgccaagg tggaaagacc 650
 gcttgagccc aggagttcga ggctgcaatg agttatgatt gcaccactgc 700
 actccagcct gggcggcaga gaaaggctcc atctctaaaa aaagaagagc 750
 taagtgtgtg acctaaaaca tgcagtatat aaactggctg aacttagaaa 800
 taaactgttt tcatgttatg aaaa 824

<210> 564
 <211> 153
 <212> PRT
 <213> Homo Sapien

<400> 564
 Met Gly Leu Gly Gln Pro Gln Ala Trp Leu Leu Gly Leu Pro Thr
 1 5 10 15
 Ala Val Val Tyr Gly Ser Leu Ala Leu Phe Thr Thr Ile Leu His
 20 25 30
 Asn Val Phe Leu Leu Tyr Tyr Val Asp Thr Phe Val Ser Val Tyr
 35 40 45
 Lys Ile Asn Lys Met Ala Phe Trp Val Gly Glu Thr Val Phe Leu
 50 55 60
 Leu Trp Asn Ser Leu Asn Asp Pro Leu Phe Gly Trp Leu Ser Asp
 65 70 75
 Arg Gln Phe Leu Ser Ser Gln Pro Arg Leu Cys Gly Glu Glu Leu
 80 85 90
 Leu Val Gly Ser Glu Glu Ala Asp Ser Ile Thr Leu Gly Arg Tyr
 95 100 105
 Leu Arg Gln Leu Ala Arg His Arg Asn Phe Leu Trp Phe Val Ser
 110 115 120
 Met Asp Leu Val Gln Val Gln Trp Leu Thr Pro Val Ile Pro Ala
 125 130 135
 Leu Arg Asp Ala Lys Val Glu Arg Pro Leu Glu Pro Arg Ser Ser
 140 145 150
 Arg Leu Gln

<210> 565
 <211> 320
 <212> DNA

<213> Homo Sapien

<400> 565

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gctcagccct tagggaaggg ggatcaaggg agaagcccg accttcccgc 150
aggaggtggg ctgggcacag ccctgaacca tggaggtcac ccaccctgag 200
gtcgggacct gggttccctt cctatccact ggggggtccca gcctttgtct 250
tcattctctcc aggtcccagc ccttcacagt gggcacttcc ctgcctgtga 300
cggaggcccc agccattctcc 320

<210> 566

<211> 89

<212> PRT

<213> Homo Sapien

<400> 566

Met	His	Ser	Ala	Leu	Ala	Thr	Ala	Leu	Leu	Leu	Leu	Ile	Pro	Leu	
1				5					10					15	
Leu	Leu	Leu	Arg	Arg	Phe	Phe	Asp	Gly	Ser	Ala	Leu	Arg	Glu	Gly	
			20					25						30	
Gly	Ser	Arg	Glu	Lys	Pro	Gly	Pro	Ser	Arg	Arg	Arg	Trp	Ala	Gly	
			35					40						45	
His	Ser	Pro	Glu	Pro	Trp	Arg	Ser	Pro	Thr	Leu	Arg	Ser	Gly	Pro	
			50					55						60	
Gly	Phe	Pro	Ser	Tyr	Pro	Leu	Gly	Val	Pro	Ala	Phe	Val	Phe	Ile	
			65					70						75	
Ser	Pro	Gly	Pro	Ser	Pro	Ser	Gln	Trp	Ala	Leu	Pro	Cys	Leu		
			80					85							

<210> 567

<211> 695

<212> DNA

<213> Homo Sapien

<400> 567

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cacgtgccac tggggctgta aggaggaatg gcggccgtgg gcagcctgct 150
tggcctggca gcctcttcct ggctaggggg ccagaacgcc tctgaccaca 200
gcctgtggct cctgaggaag ccccgaggct catcctgccc cggcacgggt 250
caccagctct gccggctgag gcagagcacc gtgaaggcca ccggacctgc 300

actccgccgc ctgcacacat cctcctggcg agctgacagc agcagggcct 350
 cactcactcg tgtgcaccgc caggcttatg cactgactcta ccccgctgtg 400
 ctggtgaagc aggatggctc caccatccac atccgctaca gggagccacg 450
 gcgcattgctg gcgatgcccc tagatctgga caccctgtct cctgaggagc 500
 gccggggccag gctgcggaag cgtgaggctc agctccagtc gaggaaggag 550
 tacgagcagg agctcagtga tgacttgcat gtggagcgct accgacagtt 600
 ctggaccagg accaagaagt gaccgtggct ccagccaccc cgggacattg 650
 ctaagatggg agggctgttc ttaaataact cgttcttgaa gctgc 695

<210> 568

<211> 164

<212> PRT

<213> Homo Sapien

<400> 568

Met	Ala	Ala	Val	Gly	Ser	Leu	Leu	Gly	Leu	Ala	Ala	Ser	Ser	Trp	1	5	10	15
Leu	Gly	Gly	Gln	Asn	Ala	Ser	Asp	His	Ser	Leu	Trp	Leu	Leu	Arg	20	25	30	
Lys	Pro	Arg	Gly	Ser	Ser	Cys	Pro	Gly	Thr	Gly	His	Gln	Leu	Cys	35	40	45	
Arg	Leu	Arg	Gln	Ser	Thr	Val	Lys	Ala	Thr	Gly	Pro	Ala	Leu	Arg	50	55	60	
Arg	Leu	His	Thr	Ser	Ser	Trp	Arg	Ala	Asp	Ser	Ser	Arg	Ala	Ser	65	70	75	
Leu	Thr	Arg	Val	His	Arg	Gln	Ala	Tyr	Ala	Arg	Leu	Tyr	Pro	Val	80	85	90	
Leu	Leu	Val	Lys	Gln	Asp	Gly	Ser	Thr	Ile	His	Ile	Arg	Tyr	Arg	95	100	105	
Glu	Pro	Arg	Arg	Met	Leu	Ala	Met	Pro	Ile	Asp	Leu	Asp	Thr	Leu	110	115	120	
Ser	Pro	Glu	Glu	Arg	Arg	Ala	Arg	Leu	Arg	Lys	Arg	Glu	Ala	Gln	125	130	135	
Leu	Gln	Ser	Arg	Lys	Glu	Tyr	Glu	Gln	Glu	Leu	Ser	Asp	Asp	Leu	140	145	150	
His	Val	Glu	Arg	Tyr	Arg	Gln	Phe	Trp	Thr	Arg	Thr	Lys	Lys	155	160			

<210> 569

<211> 2457

<212> DNA

<213> Homo Sapien

<400> 569

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aattccctgg ctggcaatct tctgtatatg gacacagtga tgtgccagaa 150
gggcttttga tccctgagac tgaaggaagc tccatttttg gagccctccc 200
acaccttgct ctgtgtgect ctcatctga tttgaattct tattttgcta 250
tatgatgaag ctgtaatcct aagtttaaaa aggggagtag gtattgacat 300
catggtagaa ataggctgtc ttatggaact gtagttaggg atcacagcct 350
attggaccag cccagcctt agcagcagtt ctgtacactg attcttccag 400
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tttggtgtcg attagagtta acttacagac tctcaaaacc ccattctttg 500
ggtttaggca acttcagaa gtagtcattt atttgaattt tagtctaaga 550
tcaactgaat tagggaggtt tgaaagtgtg aaagcaaata gtacattccc 600
aaacactttg taaagaagga atgggtagtg tcaactaaag gaaatgggtg 650
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cgagctcagc tgtcctgtc cgtgtcctct ccataccctt gttgactgtg 750
ctcatattag ccagagacct aagtgtcctt ggaggatgtc cctggggccc 800
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gaagtcttca acttcagcgt ggacaagctc tatgacctcc tcttcaccaa 950
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 gagtcccaac aaaagtacca cgatactgag ctccaaaaat ggagggaaat 1850
 catcaaatcc tcagtgatgc tccttgacca gatgaaggac tcgctcatca 1900
 accttcagaa cggcatcagg tcccgcgact acacgtcggg aagtgaagaa 1950
 aagaggaatc gctatcattg acaaggcagg aacaggggtg ctgcaagagg 2000
 cctgtgcaat acatgtacat agaccatata aatatatata tataaatata 2050
 tatatatata gaatataaat atatatatta tatacagatt ttaaaaaaga 2100
 gataatgcct atgtaccagg gagaaggagc gggccctccc gcgccctgtg 2150
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 ccgcctctca gcaccgacct cccctgatct ccctcctccc accctctggt 2250
 cccacccct tcccttgctg gccattcttg gcttttagaa gggaaatggt 2300
 gagccaaagt tatgcctgcg aagaccctaa ggtctcaaaa agaagtctta 2350
 agacggcatt gcttaagggtg cttcattccc taatcccctt ttgatttggt 2400
 tccaaaataa aagagaatct tttcttcctt aaaaaaaaaa aaaaaaaaaa 2450
 aaaaaaa 2457

<210> 570

<211> 425

<212> PRT

<213> Homo Sapien

<400> 570

Met	Pro	Thr	Ser	Ser	Ala	Val	Leu	Leu	Arg	Val	Leu	Ser	Ile	Pro
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Leu	Leu	Thr	Val	Leu	Ile	Leu	Ala	Arg	Asp	Leu	Ser	Ala	Leu	Gly
				20					25					30
Gly	Cys	Pro	Trp	Gly	Pro	Leu	Pro	Leu	Arg	Cys	His	Cys	Leu	Leu
				35					40					45

Pro	Asp	Pro	Leu	Phe 50	Cys	Ala	Gly	Glu	Val 55	Gln	Ala	Phe	Tyr	Glu 60
Asp	Leu	Ser	Gly	Arg 65	Gln	Tyr	Val	Asn	Glu 70	Val	Phe	Asn	Phe	Ser 75
Val	Asp	Lys	Leu	Tyr 80	Asp	Leu	Leu	Phe	Thr 85	Asn	Ser	Pro	Phe	Gln 90
Arg	Asp	Phe	Met	Glu 95	Gln	Arg	Arg	Phe	Ser 100	Asp	Ile	Ile	Phe	His 105
Pro	Trp	Lys	Lys	Glu 110	Glu	Asn	Gly	Asn	Gln 115	Ser	Arg	Val	Ile	Leu 120
Tyr	Thr	Ile	Thr	Leu 125	Thr	Asn	Pro	Leu	Ala 130	Pro	Lys	Thr	Ala	Thr 135
Val	Arg	Glu	Thr	Gln 140	Thr	Met	Tyr	Lys	Ala 145	Ser	Gln	Glu	Ser	Glu 150
Cys	Tyr	Val	Ile	Asp 155	Ala	Glu	Val	Leu	Thr 160	His	Asp	Val	Pro	Tyr 165
His	Asp	Tyr	Phe	Tyr 170	Thr	Ile	Asn	Arg	Tyr 175	Thr	Leu	Thr	Arg	Val 180
Ala	Arg	Asn	Lys	Ser 185	Arg	Leu	Arg	Val	Ser 190	Thr	Glu	Leu	Arg	Tyr 195
Arg	Lys	Gln	Pro	Trp 200	Gly	Leu	Val	Lys	Thr 205	Phe	Ile	Glu	Lys	Asn 210
Phe	Trp	Ser	Gly	Leu 215	Glu	Asp	Tyr	Phe	Arg 220	His	Leu	Glu	Ser	Glu 225
Leu	Ala	Lys	Thr	Glu 230	Ser	Thr	Tyr	Leu	Ala 235	Glu	Met	His	Arg	Gln 240
Ser	Pro	Lys	Glu	Lys 245	Ala	Ser	Lys	Thr	Thr 250	Thr	Val	Arg	Arg	Arg 255
Lys	Arg	Pro	His	Ala 260	His	Leu	Arg	Val	Pro 265	His	Leu	Glu	Glu	Val 270
Met	Ser	Pro	Val	Thr 275	Thr	Pro	Thr	Asp	Glu 280	Asp	Val	Gly	His	Arg 285
Ile	Lys	His	Val	Ala 290	Gly	Ser	Thr	Gln	Thr 295	Arg	His	Ile	Pro	Glu 300
Asp	Thr	Pro	Asn	Gly 305	Phe	His	Leu	Gln	Ser 310	Val	Ser	Lys	Leu	Leu 315
Leu	Val	Ile	Ser	Cys 320	Val	Leu	Val	Leu	Leu 325	Val	Ile	Leu	Asn	Met 330
Met	Leu	Phe	Tyr	Lys	Leu	Trp	Met	Leu	Glu	Tyr	Thr	Thr	Gln	Thr

335	340	345
Leu Thr Ala Trp Gln Gly Leu Arg Leu Gln Glu Arg Leu Pro Gln		
350	355	360
Ser Gln Thr Glu Trp Ala Gln Leu Leu Glu Ser Gln Gln Lys Tyr		
365	370	375
His Asp Thr Glu Leu Gln Lys Trp Arg Glu Ile Ile Lys Ser Ser		
380	385	390
Val Met Leu Leu Asp Gln Met Lys Asp Ser Leu Ile Asn Leu Gln		
395	400	405
Asn Gly Ile Arg Ser Arg Asp Tyr Thr Ser Glu Ser Glu Glu Lys		
410	415	420
Arg Asn Arg Tyr His		
425		

<210> 571
 <211> 3244
 <212> DNA
 <213> Homo Sapien

<400> 571
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 gtgctgcaaa ttccctgtg gataaggggtg gacggctgct ctgtcaactt 150
 tgaccatttt cagattctgc gggccattgg taaagggagt tttggaaagg 200
 tatgcatcgt gcagaagcga gacactaaga aaatgtatgc aatgaagtac 250
 atgaacaagc agaagtgcac cgagagggat gaggttcgga atgttttccg 300
 ggagctgcag atcatgcaag ggctggagca ccccttctctg gtcaatctgt 350
 ggtactcctt ccaggatgag gaggacatgt tcatgggtgtt ggacctgctc 400
 ctgggaggcg acctgcgcta ccatctgcag cagaatgtgc atttcacaga 450
 ggggactgtg aaactctaca tctgtgagct ggcactggcc ctggagtatc 500
 ttcagaggta ccacatcatc cacagagaca tcaagccaga caatatcctg 550
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 agtgaaagga gcagaaagg cttcctccat ggctggcacc aagccctaca 650
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 taccctgtcg actggtggtc cctgggcatc acagcctatg agctgctgcg 750
 gggctggagg ccgtacgaaa tccactcggt caccgccatc gatgaaatcc 800

atccaatcgg tattggtgga gcggtccct atttatacaa taggaagcat 2300
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 aaactacatt ctgatctgct cagggagaag cttgcctttg aactggaaga 2400
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<210> 572

<211> 364

<212> PRT

<213> Homo Sapien

<400> 572

Met	Lys	Tyr	Met	Asn	Lys	Gln	Lys	Cys	Ile	Glu	Arg	Asp	Glu	Val
1				5					10				15	

Arg	Asn	Val	Phe	Arg	Glu	Leu	Gln	Ile	Met	Gln	Gly	Leu	Glu	His
				20					25				30	

Pro	Phe	Leu	Val	Asn	Leu	Trp	Tyr	Ser	Phe	Gln	Asp	Glu	Glu	Asp
				35					40				45	

Met	Phe	Met	Val	Val	Asp	Leu	Leu	Leu	Gly	Gly	Asp	Leu	Arg	Tyr
				50					55				60	

Gly Cys Ser Ser

<210> 573

<211> 3399

<212> DNA

<213> Homo Sapien

<400> 573

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tcggccgaaa catgagaggc tgtgtgagaa gctgcagccg ccggcagagg 150
agacctcagc atcatctaga gccacgcgt gccctgcct ccgctgcgc 200
cgccgcgcgc gtgcgcgttt ctgttctgc tactgtccca cctaaacaac 250
tcccgttaca cggacaagtg aacatctgtg gctgtcctct ctttttcttc 300
ctctcttcc aactccttct cctcctccca ctcccagcc gcagcagaaa 350
gcccccaacc caactgacgc tggcacaact gcaaacggtg tcatccgcac 400
aactttatct cgtcctcgg gctcccctaa ggcattggac ccatcgccgc 450
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gagaataaga tattttctgt taccaacaac acagaatgtg ggaagttact 950
ggaggaaatc aaatgtgcac ttgtctctcc acattctcaa agcctgttcc 1000
actcacctga gagagaagtc ttggaaagag acctagtact tcctctgtc 1050
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aagatggtgg gttgtgcttt ccagattttc caagaaaaca agtcagagga 1200
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ccagcatcta actacttggg ccagatggaa gaatatgaca aagtggaga 1250
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	110	115	120
Arg Arg Val Phe Tyr Phe Cys Lys Val	Ala Ser Leu Tyr Ile Phe		
125	130	135	
Leu Ser Pro Pro Pro Pro Ser Val Ser	Gly Val Pro Tyr Ser Pro		
140	145	150	
Ala Asn Ser Ser Trp Ser Cys Ala Leu	Val Pro Leu Leu Gly Ser		
155	160	165	
Gly Val Pro Pro His Pro Pro Ala Pro	Ser Pro Cys Cys Ser Gly		
170	175	180	
Gln Thr Met Leu Lys Met Leu Ser Phe	Lys Leu Leu Leu Leu Ala		
185	190	195	
Val Ala Leu Gly Phe Phe Glu Gly Asp	Ala Lys Phe Gly Glu Arg		
200	205	210	
Asn Glu Gly Ser Gly Ala Arg Arg Arg	Arg Cys Leu Asn Gly Asn		
215	220	225	
Pro Pro Lys Arg Leu Lys Arg Arg Asp	Arg Arg Met Met Ser Gln		
230	235	240	
Leu Glu Leu Leu Ser Gly Gly Glu Met	Leu Cys Gly Gly Phe Tyr		
245	250	255	
Pro Arg Leu Ser Cys Cys Leu Arg Ser	Asp Ser Pro Gly Leu Gly		
260	265	270	
Arg Leu Glu Asn Lys Ile Phe Ser Val	Thr Asn Asn Thr Glu Cys		
275	280	285	
Gly Lys Leu Leu Glu Glu Ile Lys Cys	Ala Leu Cys Ser Pro His		
290	295	300	
Ser Gln Ser Leu Phe His Ser Pro Glu	Arg Glu Val Leu Glu Arg		
305	310	315	
Asp Leu Val Leu Pro Leu Leu Cys Lys	Asp Tyr Cys Lys Glu Phe		
320	325	330	
Phe Tyr Thr Cys Arg Gly His Ile Pro	Gly Phe Leu Gln Thr Thr		
335	340	345	
Ala Asp Glu Phe Cys Phe Tyr Tyr Ala	Arg Lys Asp Gly Gly Leu		
350	355	360	
Cys Phe Pro Asp Phe Pro Arg Lys Gln	Val Arg Gly Pro Ala Ser		
365	370	375	
Asn Tyr Leu Asp Gln Met Glu Glu Tyr	Asp Lys Val Glu Glu Ile		
380	385	390	
Ser Arg Lys His Lys His Asn Cys Phe	Cys Ile Gln Glu Val Val		
395	400	405	

Met Gln Val Asn Gln
80

<210> 577
<211> 732
<212> DNA
<213> Homo Sapien

<400> 577
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tgatggcttc atacatcgga tagttcccaa gttgatacaa aactggaaga 100
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atgatagcca catggtccaa gcatgctaaa cctgtggcat gttcagggga 200
ctggcttggg gtgagagata agtgtttcta tttttctgat gataccagaa 250
attggacagc cagtaaaata ttttgtagtt tgcagaaagc agaacttgct 300
cagattgata cacaagaaga catggaatth ttgaagaggt acgcaggaac 350
tgatatgcac tggattggac taagcaggaa acaaggagat tcttggaat 400
ggacaaatgg caccacattc aatgggtggc catcaaactc caaatggtct 450
tgcaactgga gcctccgaca atggcttctt ctgctgggac cccttagata 500
ggcctctgag ggagctctga ctgccgtttc cccaaaacaa tgtccctgt 550
cagcaggaag cagttaaate agtcttcate cttatcctta atataacggc 600
agttagatgt acttctttag agggagtaaa tttatcaatt cagagcaatt 650
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ataatgtaga ataaactaca gaaaacttct tg 732

<210> 578
<211> 100
<212> PRT
<213> Homo Sapien

<400> 578
Asp Trp Leu Gly Val Arg Asp Lys Cys Phe Tyr Phe Ser Asp Asp
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Thr Arg Asn Trp Thr Ala Ser Lys Ile Phe Cys Ser Leu Gln Lys
20 25 30
Ala Glu Leu Ala Gln Ile Asp Thr Gln Glu Asp Met Glu Phe Leu
35 40 45
Lys Arg Tyr Ala Gly Thr Asp Met His Trp Ile Gly Leu Ser Arg
50 55 60
Lys Gln Gly Asp Ser Trp Lys Trp Thr Asn Gly Thr Thr Phe Asn

65

70

75

Gly Trp Pro Ser Asn Ser Lys Trp Ser Cys Asn Trp Ser Leu Arg
80 85 90

Gln Trp Leu Leu Leu Leu Gly Pro Leu Arg
95 100

<210> 579

<211> 925

<212> DNA

<213> Homo Sapien

<400> 579

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cagttcagga ttccactgca atgagctggg ggaggaataa tttctggatc 150
atcttagctg tggccatcat tgttgtctct gtgggcctgg gcctcatcct 200
gtactgtgtc tgtaagtggc agcttagacg aggcaagaaa tgggaaattg 250
ccaagcccct gaaacacaag caagtagatg aagaaaagat gtatgagaat 300
gttcttaatg agtcgccagt tcaattaccg cctctgccac cgaggaattg 350
gccttctcta gaagactctt cccacacagga agccccaagt cagccgcccg 400
ctacatactc actggtaaat aaagttaaaa ataagaagac tgtttccatc 450
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aaatactgaa aaagcatcat tttgaaacag ccattttctt tttttggcaa 550
aactgaagag gggtcacaca acttatttta aaacaatcaa gaatgggtga 600
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agcatttggg tgtgcaaaaa aaaaa 925

<210> 580

<211> 145

<212> PRT

<213> Homo Sapien

<400> 580

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125	130	135
Thr Cys Cys Cys Cys Thr Cys Cys Gly Ala Gly Cys Cys Thr Gly		
140	145	150
Cys Thr Gly Cys Ala Cys Thr Cys Cys Ala Cys Gly Thr Cys Cys		
155	160	165
Cys Cys Cys Thr Ala Cys Cys Ala Gly Gly Gly Cys Thr Cys Cys		
170	175	180
Ala Gly Cys Cys Cys Cys Cys Ala Gly Gly Gly Ala Ala Ala Thr		
185	190	195
Cys Thr Cys Cys Gly Ala Cys Cys Ala Gly Gly Cys Cys Cys Gly		
200	205	210
Cys Cys Cys Ala Gly Gly Ala Gly Cys Cys Ala Gly Ala Thr Cys		
215	220	225
Cys Ala Gly Gly Cys Thr Cys Cys Thr Gly Gly Ala Ala Gly Ala		
230	235	240
Ala Cys Cys Ala Thr Gly Thr Cys Cys Gly Gly Cys Ala Gly Cys		
245	250	255
Thr Ala Cys Thr Gly Gly Thr Cys Ala Thr Gly Cys Cys Ala Gly		
260	265	270
Gly Cys Ala Cys Ala Cys Ala Cys Thr Gly Cys Thr Gly Cys Cys		
275	280	285
Cys Ala Ala Gly Ala Gly Gly Ala Gly Cys Thr Gly Cys Thr Gly		
290	295	300
Thr Thr Thr Gly Ala Ala Thr Thr Ala Thr Cys Thr Gly Thr Gly		
305	310	315
Ala Ala Thr Gly Thr Thr Gly Gly Gly Ala Ala Gly Ala Gly Gly		
320	325	330
Ala Ala Thr Gly Cys Cys Ala Gly Ala Gly Cys Thr Gly Cys Cys		
335	340	345
Gly Gly Cys Thr Gly Ala Ala Ala Ala Thr Thr Ala Cys Cys Cys		
350	355	360
Ala Ala Cys Cys Ala Ala Gly Ala Gly Ala Ala Ala Thr Cys Thr		
365	370	375
Gly Cys Ala Gly Gly Ala Thr Gly Gly Ala Cys Thr Thr Thr Cys		
380	385	390
Thr Gly Gly Thr Cys Cys Thr Cys Thr Thr Cys Thr Thr Gly Thr		
395	400	405

Thr Cys Thr Ala Cys Cys Thr Gly Gly Cys Thr Thr Cys Gly Gly	410	415	420
Thr Gly Cys Thr Gly Ala Thr Gly Gly Gly Thr Cys Thr Thr Gly	425	430	435
Thr Thr Cys Thr Thr Ala Thr Cys Thr Gly Cys Gly Thr Cys Thr	440	445	450
Gly Cys Thr Cys Gly Ala Ala Ala Ala Cys Cys Cys Ala Thr Ala	455	460	465
Gly Cys Thr Thr Gly Ala Ala Ala Gly Gly Cys Cys Thr Gly Gly	470	475	480
Cys Cys Ala Gly Gly Gly Gly Ala Gly Gly Ala Gly Cys Ala Cys	485	490	495
Ala Gly Ala Thr Ala Thr Thr Thr Thr Cys Cys Thr Gly Thr Ala	500	505	510
Thr Ala Ala Thr Thr Cys Cys Ala Gly Ala Ala Thr Gly Thr Cys	515	520	525
Thr Thr Cys Ala Gly Ala Gly Ala Gly Cys Cys Gly Thr Gly Cys	530	535	540
Ala Thr Gly Gly Ala Thr Thr Gly Cys Thr Thr Cys Ala Thr Thr	545	550	555
Ala Cys Cys Thr Thr Thr Thr Cys Cys Ala Thr Ala Cys Gly Ala	560	565	570
Gly Ala Ala Ala Cys Cys Ala Cys Ala Cys Cys Thr Thr Cys Ala	575	580	585
Thr Thr Gly Thr Cys Cys Thr Gly Cys Ala Cys Cys Thr Gly Gly	590	595	600
Thr Cys Thr Thr Gly Cys Ala Ala Gly Gly Gly Ala Thr Gly Gly	605	610	615
Thr Thr Thr Ala Thr Ala Cys Thr Gly Ala Gly Thr Ala Cys Ala	620	625	630
Cys Cys Thr Gly Gly Gly Ala Ala Gly Thr Ala Thr Thr Thr Gly	635	640	645
Gly Cys Thr Ala Cys Thr Gly Thr Cys Ala Gly Gly Ala Gly Cys	650	655	660
Thr Gly Gly Ala Gly Thr Thr Gly Thr Cys Cys Thr Thr Gly Cys	665	670	675
Ala Thr Thr Ala Cys Cys Thr Thr Cys Thr Thr Cys Thr Gly Cys	680	685	690
Cys Cys Thr Ala Thr Cys Thr Gly Cys Thr Gly Cys Thr Ala Gly			

	695	700	705
Gly Thr Gly Thr	Ala Ala Ala Cys Cys	Thr Gly Thr Thr Thr	Thr
	710	715	720
Thr Thr Thr Thr	Cys Ala Cys Cys Cys	Thr Gly Ala Cys Thr	Thr
	725	730	735
Gly Thr Gly Gly	Ala Ala Cys Cys Ala	Ala Thr Cys Cys Thr	Gly
	740	745	750
Gly Cys Ala Thr	Thr Ala Thr Ala Ala	Cys Ala Ala Ala Ala	Gly
	755	760	765
Cys Ala Ala Ala	Thr Gly Ala Ala Thr	Thr Ala Thr Thr Ala	Thr
	770	775	780
Thr Thr Cys Thr	Thr Cys Ala Thr Gly	Thr Thr Thr Ala Thr	Gly
	785	790	795
Ala Ala Thr Thr	Thr Gly Ala Thr Gly	Ala Ala Gly Thr Gly	Ala
	800	805	810
Thr Gly Thr Thr	Thr Cys Cys Ala Ala	Ala Gly Ala Ala Cys	Gly
	815	820	825
Thr Gly Ala Gly	Gly Thr Gly Cys Thr	Cys Thr Ala Cys Thr	Thr
	830	835	840
Gly Thr Gly Ala	Thr Thr Thr Ala Ala	Gly Gly Ala Ala Ala	Cys
	845	850	855
Cys Ala Gly Cys	Thr Cys Gly Ala Thr	Cys Cys Ala Ala Gly	Cys
	860	865	870
Ala Cys Thr Gly	Cys Ala Gly Thr Gly	Thr Gly Thr Gly Thr	Ala
	875	880	885
Ala Cys Thr Gly	Gly Thr Gly Thr Gly	Thr Gly Cys Ala Cys	Cys
	890	895	900
Gly Thr Thr Thr	Cys Gly Ala Cys Cys	Ala Thr Cys Ala Cys	Thr
	905	910	915
Gly Thr Gly Thr	Thr Thr Gly Gly Gly	Thr Gly Ala Ala Cys	Ala
	920	925	930
Ala Cys Thr Gly	Cys Ala Thr Cys Gly	Gly Gly Gly Cys Cys	Thr
	935	940	945
Gly Gly Ala Ala	Cys Ala Thr Cys Ala	Gly Gly Thr Ala Cys	Thr
	950	955	960
Thr Cys Cys Thr	Cys Ala Thr Cys Thr	Ala Cys Gly Thr Cys	Thr
	965	970	975
Thr Gly Ala Cys	Cys Thr Thr Gly Ala	Cys Gly Gly Cys Cys	Thr
	980	985	990

1280	1285	1290
Thr Gly Gly Cys Cys Thr Gly Gly Cys Cys Thr Cys Cys Gly Thr		
1295	1300	1305
Cys Ala Gly Cys Ala Gly Ala Gly Cys Cys Cys Cys Ala Ala Gly		
1310	1315	1320
Thr Cys Cys Ala Cys Cys Gly Gly Ala Ala Cys Ala Thr Thr Cys		
1325	1330	1335
Ala Cys Thr Cys Cys Cys Ala Thr Gly Gly Gly Cys Thr Thr Cys		
1340	1345	1350
Gly Gly Ala Gly Cys Ala Ala Cys Cys Thr Thr Cys Ala Ala Gly		
1355	1360	1365
Ala Gly Ala Thr Cys Thr Thr Thr Cys Thr Ala Cys Cys Thr Gly		
1370	1375	1380
Cys Cys Thr Thr Thr Cys Cys Ala Thr Gly Thr Cys Ala Thr Gly		
1385	1390	1395
Ala Gly Ala Gly Gly Ala Ala Gly Ala Ala Ala Cys Ala Ala Gly		
1400	1405	1410
Ala Ala Thr Gly Ala Cys Ala Ala Gly Thr Gly Thr Ala Thr Gly		
1415	1420	1425
Ala Cys Thr Gly Cys Cys Thr Thr Thr Gly		
1430	1435	

<210> 582
 <211> 344
 <212> PRT
 <213> Homo Sapien

<400> 582

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Lys Gly Leu Ala Arg Gly Gly Ala Gln Ile Phe Ser Cys Ile Ile
35 40 45
Pro Glu Cys Leu Gln Arg Ala Val His Gly Leu Leu His Tyr Leu
50 55 60
Phe His Thr Arg Asn His Thr Phe Ile Val Leu His Leu Val Leu
65 70 75
Gln Gly Met Val Tyr Thr Glu Tyr Thr Trp Glu Val Phe Gly Tyr
80 85 90
Cys Gln Glu Leu Glu Leu Ser Leu His Tyr Leu Leu Leu Pro Tyr
95 100 105

Leu Leu Leu Gly Val Asn Leu Phe Phe Phe Thr Leu Thr Cys Gly
110 115 120

Thr Asn Pro Gly Ile Ile Thr Lys Ala Asn Glu Leu Leu Phe Leu
125 130 135

His Val Tyr Glu Phe Asp Glu Val Met Phe Pro Lys Asn Val Arg
140 145 150

Cys Ser Thr Cys Asp Leu Arg Lys Pro Ala Arg Ser Lys His Cys
155 160 165

Ser Val Cys Asn Trp Cys Val His Arg Phe Asp His His Cys Val
170 175 180

Trp Val Asn Asn Cys Ile Gly Ala Trp Asn Ile Arg Tyr Phe Leu
185 190 195

Ile Tyr Val Leu Thr Leu Thr Ala Ser Ala Ala Thr Val Ala Ile
200 205 210

Val Ser Thr Thr Phe Leu Val His Leu Val Val Met Ser Asp Leu
215 220 225

Tyr Gln Glu Thr Tyr Ile Asp Asp Leu Gly His Leu His Val Met
230 235 240

Asp Thr Val Phe Leu Ile Gln Tyr Leu Phe Leu Thr Phe Pro Arg
245 250 255

Ile Val Phe Met Leu Gly Phe Val Val Val Leu Ser Phe Leu Leu
260 265 270

Gly Gly Tyr Leu Leu Phe Val Leu Tyr Leu Ala Ala Thr Asn Gln
275 280 285

Thr Thr Asn Glu Trp Tyr Arg Gly Asp Trp Ala Trp Cys Gln Arg
290 295 300

Cys Pro Leu Val Ala Trp Pro Pro Ser Ala Glu Pro Gln Val His
305 310 315

Arg Asn Ile His Ser His Gly Leu Arg Ser Asn Leu Gln Glu Ile
320 325 330

Phe Leu Pro Ala Phe Pro Cys His Glu Arg Lys Lys Gln Glu
335 340

<210> 583

<211> 2973

<212> DNA

<213> Homo Sapien

<400> 583

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<210> 584
 <211> 708
 <212> PRT
 <213> Homo Sapien

<400> 584

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Phe	Arg	Gly	Arg	Ala	Gly	Pro	Ser	Pro	His	Phe	Leu	Gln	Gln	Pro
				20				25						30
Glu	Asp	Leu	Val	Val	Leu	Leu	Gly	Glu	Glu	Ala	Arg	Leu	Pro	Cys
				35				40						45
Ala	Leu	Gly	Ala	Tyr	Trp	Gly	Leu	Val	Gln	Trp	Thr	Lys	Ser	Gly
				50				55						60
Leu	Ala	Leu	Gly	Gly	Gln	Arg	Asp	Leu	Pro	Gly	Trp	Ser	Arg	Tyr
				65				70						75
Trp	Ile	Ser	Gly	Asn	Ala	Ala	Asn	Gly	Gln	His	Asp	Leu	His	Ile
				80				85						90
Arg	Pro	Val	Glu	Leu	Glu	Asp	Glu	Ala	Ser	Tyr	Glu	Cys	Gln	Ala
				95				100						105
Thr	Gln	Ala	Gly	Leu	Arg	Ser	Arg	Pro	Ala	Gln	Leu	His	Val	Leu
				110				115						120
Val	Pro	Pro	Glu	Ala	Pro	Gln	Val	Leu	Gly	Gly	Pro	Ser	Val	Ser
				125				130						135
Leu	Val	Ala	Gly	Val	Pro	Ala	Asn	Leu	Thr	Cys	Arg	Ser	Arg	Gly
				140				145						150
Asp	Ala	Arg	Pro	Thr	Pro	Glu	Leu	Leu	Trp	Phe	Arg	Asp	Gly	Val
				155				160						165
Leu	Leu	Asp	Gly	Ala	Thr	Phe	His	Gln	Thr	Leu	Leu	Lys	Glu	Gly
				170				175						180
Thr	Pro	Gly	Ser	Val	Glu	Ser	Thr	Leu	Thr	Leu	Thr	Pro	Phe	Ser
				185				190						195
His	Asp	Asp	Gly	Ala	Thr	Phe	Val	Cys	Arg	Ala	Arg	Ser	Gln	Ala
				200				205						210
Leu	Pro	Thr	Gly	Arg	Asp	Thr	Ala	Ile	Thr	Leu	Ser	Leu	Gln	Tyr
				215				220						225
Pro	Pro	Glu	Val	Thr	Leu	Ser	Ala	Ser	Pro	His	Thr	Val	Gln	Glu
				230				235						240
Gly	Glu	Lys	Val	Ile	Phe	Leu	Cys	Gln	Ala	Thr	Ala	Gln	Pro	Pro
				245				250						255
Val	Thr	Gly	Tyr	Arg	Trp	Ala	Lys	Gly	Gly	Ser	Pro	Val	Leu	Gly

260	265	270
Ala Arg Gly Pro Arg Leu Glu Val Val	Ala Asp Ala Ser Phe Leu	
275	280	285
Thr Glu Pro Val Ser Cys Glu Val Ser	Asn Ala Val Gly Ser Ala	
290	295	300
Asn Arg Ser Thr Ala Leu Asp Val Leu	Phe Gly Pro Ile Leu Gln	
305	310	315
Ala Lys Pro Glu Pro Val Ser Val Asp	Val Gly Glu Asp Ala Ser	
320	325	330
Phe Ser Cys Ala Trp Arg Gly Asn Pro	Leu Pro Arg Val Thr Trp	
335	340	345
Thr Arg Arg Gly Gly Ala Gln Val Leu	Gly Ser Gly Ala Thr Leu	
350	355	360
Arg Leu Pro Ser Val Gly Pro Glu Asp	Ala Gly Asp Tyr Val Cys	
365	370	375
Arg Ala Glu Ala Gly Leu Ser Gly Leu	Arg Gly Gly Ala Ala Glu	
380	385	390
Ala Arg Leu Thr Val Asn Ala Pro Pro	Val Val Thr Ala Leu His	
395	400	405
Ser Ala Pro Ala Phe Leu Arg Gly Pro	Ala Arg Leu Gln Cys Leu	
410	415	420
Val Phe Ala Ser Pro Ala Pro Asp Ala	Val Val Trp Ser Trp Asp	
425	430	435
Glu Gly Phe Leu Glu Ala Gly Ser Gln	Gly Arg Phe Leu Val Glu	
440	445	450
Thr Phe Pro Ala Pro Glu Ser Arg Gly	Gly Leu Gly Pro Gly Leu	
455	460	465
Ile Ser Val Leu His Ile Ser Gly Thr	Gln Glu Ser Asp Phe Ser	
470	475	480
Arg Ser Phe Asn Cys Ser Ala Arg Asn	Arg Leu Gly Glu Gly Gly	
485	490	495
Ala Gln Ala Ser Leu Gly Arg Arg Asp	Leu Leu Pro Thr Val Arg	
500	505	510
Ile Val Ala Gly Val Ala Ala Ala Thr	Thr Thr Leu Leu Met Val	
515	520	525
Ile Thr Gly Val Ala Leu Cys Cys Trp	Arg His Ser Lys Ala Ser	
530	535	540
Ala Ser Phe Ser Glu Gln Lys Asn Leu	Met Arg Ile Pro Gly Ser	
545	550	555

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<210> 586
 <211> 600
 <212> PRT
 <213> Homo Sapien

<400> 586
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 Leu Gly Tyr Met Ala Lys Asp Lys Phe Arg Arg Met Asn Glu Gly
 35 40 45
 Gln Val Tyr Ser Phe Ser Gln Gln Pro Gln Asp Gln Val Val Val
 50 55 60
 Ser Gly Gln Pro Val Thr Leu Leu Cys Ala Ile Pro Glu Tyr Asp
 65 70 75
 Gly Phe Val Leu Trp Ile Lys Asp Gly Leu Ala Leu Gly Val Gly
 80 85 90
 Arg Asp Leu Ser Ser Tyr Pro Gln Tyr Leu Val Val Gly Asn His
 95 100 105
 Leu Ser Gly Glu His His Leu Lys Ile Leu Arg Ala Glu Leu Gln
 110 115 120
 Asp Asp Ala Val Tyr Glu Cys Gln Ala Ile Gln Ala Ala Ile Arg
 125 130 135
 Ser Arg Pro Ala Arg Leu Thr Val Leu Val Pro Pro Asp Asp Pro
 140 145 150

440	445	450
Ile Ala Trp Ser Trp Lys Glu Asn Val	Leu Glu Ser Gly Thr Ser	
455	460	465
Gly Arg Tyr Thr Val Glu Thr Ile Ser	Thr Glu Glu Gly Val Ile	
470	475	480
Ser Thr Leu Thr Ile Ser Asn Ile Val	Arg Ala Asp Phe Gln Thr	
485	490	495
Ile Tyr Asn Cys Thr Ala Trp Asn Ser	Phe Gly Ser Asp Thr Glu	
500	505	510
Ile Ile Arg Leu Lys Glu Gln Gly Ser	Glu Met Lys Ser Gly Ala	
515	520	525
Gly Leu Glu Ala Glu Ser Val Pro Met	Ala Val Ile Ile Gly Val	
530	535	540
Ala Val Gly Ala Gly Val Ala Phe Leu	Val Leu Met Ala Thr Ile	
545	550	555
Val Ala Phe Cys Cys Ala Arg Ser Gln	Arg Ser Thr Gly Gly Arg	
560	565	570
Ser Gly Ile Ser Gly Arg Gly Thr Glu	Lys Lys Ala Arg Leu Arg	
575	580	585
Leu Pro Arg Arg Ala Ser Lys Gln Glu	Cys Asn Glu Gln Gly Ser	
590	595	600

<210> 587
 <211> 1248
 <212> DNA
 <213> Homo Sapien

<400> 587
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 aaggcactag ataccctgcc tgcaggtacc actattcccc cacagagggg 200
 tttgttcttg tcaacttgta tgacttgagg ccagatagtt tccttggtta 250
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 gcattggagc tggctgtgcc tgaggcagac ctggaccgtg gacatggggc 350
 aatgccttga gcggaagggg aagccactga attttgggtg tcaccaggta 400
 aacagagccc tcagcatctg aatagaaact gaacaggaac agaagagatt 450
 acactacatc tgagatggag acctttctc tgctgctgct cagcctgggc 500

ctggttcttg cagaagcatc agaaagcaca atgaagataa ttaaagaaga 550
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 aacagaccat tgagatatta atgaacccga tcctgttagt taaaaatacc 650
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<210> 588

<211> 199

<212> PRT

<213> Homo Sapien

<400> 588

Met	Glu	Thr	Phe	Pro	Leu	Leu	Leu	Leu	Ser	Leu	Gly	Leu	Val	Leu
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Ala	Glu	Ala	Ser	Glu	Ser	Thr	Met	Lys	Ile	Ile	Lys	Glu	Glu	Phe
				20					25					30

Thr	Asp	Glu	Glu	Met	Gln	Tyr	Asp	Met	Ala	Lys	Ser	Gly	Gln	Glu
				35					40					45

Lys	Gln	Thr	Ile	Glu	Ile	Leu	Met	Asn	Pro	Ile	Leu	Leu	Val	Lys
				50					55					60

Asn	Thr	Ser	Leu	Ser	Met	Ser	Lys	Asp	Asp	Met	Ser	Ser	Thr	Leu
				65					70					75

Leu	Thr	Phe	Arg	Ser	Leu	His	Tyr	Asn	Asp	Pro	Lys	Gly	Asn	Ser
				80					85					90

Ser	Gly	Asn	Asp	Lys	Glu	Cys	Cys	Asn	Asp	Met	Thr	Val	Trp	Arg
				95					100					105

Lys	Val	Ser	Glu	Ala	Asn	Gly	Ser	Cys	Lys	Trp	Ser	Asn	Asn	Phe
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Ile Arg Ser Ser Thr Glu Val Met Arg Arg Val His Arg Ala Pro					
	125		130		135
Ser Cys Lys Phe Val Gln Asn Pro Gly Ile Ser Cys Cys Glu Ser					
	140		145		150
Leu Glu Leu Glu Asn Thr Val Cys Gln Phe Thr Thr Gly Lys Gln					
	155		160		165
Phe Pro Arg Cys Gln Tyr His Ser Val Thr Ser Leu Glu Lys Ile					
	170		175		180
Leu Thr Val Leu Thr Gly His Ser Leu Met Ser Trp Leu Val Cys					
	185		190		195
Gly Ser Lys Leu					

<210> 589
 <211> 1510
 <212> DNA
 <213> Homo Sapien

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 gccctcccc cgggtgcccc ggacctgca cttgccgccg ctttctctgc 150
 gctgctctgg accttgetag ccggtctctgc acctcccaga agccgtgggc 200
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<210> 590
 <211> 363
 <212> PRT
 <213> Homo Sapien

<400> 590
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 20 25 30
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 35 40 45
 Val Asn Leu Ser Leu Gly His Leu Leu Leu Ala Ala Leu Asp Met
 50 55 60
 Pro Phe Thr Leu Leu Gly Val Met Arg Gly Arg Thr Pro Ser Ala
 65 70 75
 Pro Gly Ala Cys Gln Val Ile Gly Phe Leu Asp Thr Phe Leu Ala
 80 85 90
 Ser Asn Ala Ala Leu Ser Val Ala Ala Leu Ser Ala Asp Gln Trp
 95 100 105
 Leu Ala Val Gly Phe Pro Leu Arg Tyr Ala Gly Arg Leu Arg Pro

110	115	120
Arg Tyr Ala Gly Leu Leu Leu Gly Cys	Ala Trp Gly Gln Ser Leu	
125	130	135
Ala Phe Ser Gly Ala Ala Leu Gly Cys	Ser Trp Leu Gly Tyr Ser	
140	145	150
Ser Ala Phe Ala Ser Cys Ser Leu Arg	Leu Pro Pro Glu Pro Glu	
155	160	165
Arg Pro Arg Phe Ala Ala Phe Thr Ala	Thr Leu His Ala Val Gly	
170	175	180
Phe Val Leu Pro Leu Ala Val Leu Cys	Leu Thr Ser Leu Gln Val	
185	190	195
His Arg Val Ala Arg Arg His Cys Gln	Arg Met Asp Thr Val Thr	
200	205	210
Met Lys Ala Leu Ala Leu Leu Ala Asp	Leu His Pro Ser Val Arg	
215	220	225
Gln Arg Cys Leu Ile Gln Gln Lys Arg	Arg Arg His Arg Ala Thr	
230	235	240
Arg Lys Ile Gly Ile Ala Ile Ala Thr	Phe Leu Ile Cys Phe Ala	
245	250	255
Pro Tyr Val Met Thr Arg Leu Ala Glu	Leu Val Pro Phe Val Thr	
260	265	270
Val Asn Ala Gln Trp Gly Ile Leu Ser	Lys Cys Leu Thr Tyr Ser	
275	280	285
Lys Ala Val Ala Asp Pro Phe Thr Tyr	Ser Leu Leu Arg Arg Pro	
290	295	300
Phe Arg Gln Val Leu Ala Gly Met Val	His Arg Leu Leu Lys Arg	
305	310	315
Thr Pro Arg Pro Ala Ser Thr His Asp	Ser Ser Leu Asp Val Ala	
320	325	330
Gly Met Val His Gln Leu Leu Lys Arg	Thr Pro Arg Pro Ala Ser	
335	340	345
Thr His Asn Gly Ser Val Asp Thr Glu	Asn Asp Ser Cys Leu Gln	
350	355	360
Gln Thr His		

<210> 591
 <211> 2037
 <212> DNA
 <213> Homo Sapien

<400> 591

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<210> 592

<211> 499

<212> PRT

<213> Homo Sapien

<400> 592

Met	Ala	Ala	Ala	Pro	Gly	Leu	Leu	Val	Trp	Leu	Leu	Val	Leu	Arg
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Leu	Pro	Trp	Arg	Val	Pro	Gly	Gln	Leu	Asp	Pro	Ser	Thr	Gly	Arg
				20					25					30

Arg	Phe	Ser	Glu	His	Lys	Leu	Cys	Ala	Asp	Asp	Glu	Cys	Ser	Met
				35					40					45

Met	Tyr	Arg	Gly	Glu	Ala	Leu	Glu	Asp	Phe	Thr	Gly	Pro	Asp	Cys
				50					55					60

Arg	Phe	Val	Asn	Phe	Lys	Lys	Gly	Asp	Pro	Val	Tyr	Val	Tyr	Tyr
				65					70					75

Lys	Leu	Ala	Arg	Gly	Trp	Pro	Glu	Val	Trp	Ala	Gly	Ser	Val	Gly
				80					85					90

Arg	Thr	Phe	Gly	Tyr	Phe	Pro	Lys	Asp	Leu	Ile	Gln	Val	Val	His
				95					100					105

Glu	Tyr	Thr	Lys	Glu	Glu	Leu	Gln	Val	Pro	Thr	Asp	Glu	Thr	Asp
				110					115					120

Phe	Val	Cys	Phe	Asp	Gly	Gly	Arg	Asp	Asp	Phe	His	Asn	Tyr	Asn
				125					130					135

Val	Glu	Glu	Leu	Leu	Gly	Phe	Leu	Glu	Leu	Tyr	Asn	Ser	Ala	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	140		145		150
Thr Asp Ser Glu	Lys Ala Val Glu Lys	Thr Leu Gln Asp Met	Glu		
	155		160		165
Lys Asn Pro Glu	Leu Ser Lys Glu Arg	Glu Pro Glu Pro Glu	Pro		
	170		175		180
Val Glu Ala Asn	Ser Glu Glu Ser Asp	Ser Val Phe Ser Glu	Asn		
	185		190		195
Thr Glu Asp Leu	Gln Glu Gln Phe Thr	Thr Gln Lys His His	Ser		
	200		205		210
His Ala Asn Ser	Gln Ala Asn His Ala	Gln Gly Glu Gln Ala	Ser		
	215		220		225
Phe Glu Ser Phe	Glu Glu Met Leu Gln	Asp Lys Leu Lys Val	Pro		
	230		235		240
Glu Ser Glu Asn	Asn Lys Thr Ser Asn	Ser Ser Gln Val Ser	Asn		
	245		250		255
Glu Gln Asp Lys	Ile Asp Ala Tyr Lys	Leu Leu Lys Lys Glu	Met		
	260		265		270
Thr Leu Asp Leu	Lys Thr Lys Phe Gly	Ser Thr Ala Asp Ala	Leu		
	275		280		285
Val Ser Asp Asp	Glu Thr Thr Arg Leu	Val Thr Ser Leu Glu	Asp		
	290		295		300
Asp Phe Asp Glu	Glu Leu Asp Thr Glu	Tyr Tyr Ala Val Gly	Lys		
	305		310		315
Glu Asp Glu Glu	Asn Gln Glu Asp Phe	Asp Glu Leu Pro Leu	Leu		
	320		325		330
Thr Phe Thr Asp	Gly Glu Asp Met Lys	Thr Pro Ala Lys Ser	Gly		
	335		340		345
Val Glu Lys Tyr	Pro Thr Asp Lys Glu	Gln Asn Ser Asn Glu	Glu		
	350		355		360
Asp Lys Val Gln	Leu Thr Val Pro Pro	Gly Ile Lys Asn Asp	Asp		
	365		370		375
Lys Asn Ile Leu	Thr Thr Trp Gly Asp	Thr Ile Phe Ser Ile	Val		
	380		385		390
Thr Gly Gly Glu	Glu Thr Arg Asp Thr	Met Asp Leu Glu Ser	Ser		
	395		400		405
Ser Ser Glu Glu	Glu Lys Glu Asp Asp	Asp Asp Ala Leu Val	Pro		
	410		415		420
Asp Ser Lys Gln	Gly Lys Pro Gln Ser	Ala Thr Asp Tyr Ser	Asp		
	425		430		435

Pro	Asp	Asn	Val	Asp	Asp	Gly	Leu	Phe	Ile	Val	Asp	Ile	Pro	Lys
				440					445					450
Thr	Asn	Asn	Asp	Lys	Glu	Val	Asn	Ala	Glu	His	His	Ile	Lys	Gly
				455					460					465
Lys	Gly	Arg	Gly	Val	Gln	Glu	Ser	Lys	Arg	Gly	Leu	Val	Gln	Asp
				470					475					480
Glu	Thr	Glu	Leu	Glu	Asp	Glu	Asn	Gln	Glu	Gly	Phe	Lys	Thr	Glu
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Pro Ile Lys Leu														

<210> 593
 <211> 1209
 <212> DNA
 <213> Homo Sapien

<400> 593
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 gataacttat ccagcaact gggcaactcc aacaacttgt ccatggagga 450
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 tggccatcaa actgtgccaa gagctaata ttcatacttc agaccacaga 550
 tgtaatccat gtcctaagat gtggcaatgg taccaaaata gttgctacta 600
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 atttggatta gtatgcttct tccaaattct ccaagaagta agagacttgt 1150
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<210> 594

<211> 232

<212> PRT

<213> Homo Sapien

<400> 594

Met	Ser	Glu	Glu	Val	Thr	Tyr	Ala	Thr	Leu	Thr	Phe	Gln	Asp	Ser	1	5	10	15
Ala	Gly	Ala	Arg	Asn	Asn	Arg	Asp	Gly	Asn	Asn	Leu	Arg	Lys	Arg	20	25	30	
Gly	His	Pro	Ala	Pro	Ser	Pro	Ile	Trp	Arg	His	Ala	Ala	Leu	Gly	35	40	45	
Leu	Val	Thr	Leu	Cys	Leu	Met	Leu	Leu	Ile	Gly	Leu	Val	Thr	Leu	50	55	60	
Gly	Met	Met	Phe	Leu	Gln	Ile	Ser	Asn	Asp	Ile	Asn	Ser	Asp	Ser	65	70	75	
Glu	Lys	Leu	Ser	Gln	Leu	Gln	Lys	Thr	Ile	Gln	Gln	Gln	Gln	Asp	80	85	90	
Asn	Leu	Ser	Gln	Gln	Leu	Gly	Asn	Ser	Asn	Asn	Leu	Ser	Met	Glu	95	100	105	
Glu	Glu	Phe	Leu	Lys	Ser	Gln	Ile	Ser	Ser	Leu	Leu	Lys	Arg	Gln	110	115	120	
Glu	Gln	Met	Ala	Ile	Lys	Leu	Cys	Gln	Glu	Leu	Ile	Ile	His	Thr	125	130	135	
Ser	Asp	His	Arg	Cys	Asn	Pro	Cys	Pro	Lys	Met	Trp	Gln	Trp	Tyr	140	145	150	
Gln	Asn	Ser	Cys	Tyr	Tyr	Phe	Thr	Thr	Asn	Glu	Glu	Lys	Thr	Trp	155	160	165	
Ala	Asn	Ser	Arg	Lys	Asp	Cys	Ile	Asp	Lys	Asn	Ser	Thr	Leu	Val	170	175	180	
Lys	Ile	Asp	Ser	Leu	Glu	Glu	Lys	Asp	Phe	Leu	Met	Ser	Gln	Pro	185	190	195	
Leu	Leu	Met	Phe	Ser	Phe	Phe	Trp	Leu	Gly	Leu	Ser	Trp	Asp	Ser				

Ser Gly Arg Ser Trp Phe Trp Glu Asp Gly Ser Val Pro Ser Pro
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Ser Leu Tyr Val Ser Asn Tyr
 230

<210> 595
 <211> 1107
 <212> DNA
 <213> Homo Sapien

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 ctgtactggg agagctagga tggaaaacat atccattaaa tgggtgggat 300
 gccatcactg aaatggatga acataatagg cccattcaca cataccagg 350
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aaaaaaa 1107

<210> 596

<211> 285

<212> PRT

<213> Homo Sapien

<400> 596

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20 25 30

Ser Asn Asn Gln Val Val Leu Leu Asp Thr Thr Thr Val Leu Gly
35 40 45

Glu Leu Gly Trp Lys Thr Tyr Pro Leu Asn Gly Trp Asp Ala Ile
50 55 60

Thr Glu Met Asp Glu His Asn Arg Pro Ile His Thr Tyr Gln Val
65 70 75

Cys Asn Val Met Glu Pro Asn Gln Asn Asn Trp Leu Arg Thr Asn
80 85 90

Trp Ile Ser Arg Asp Ala Ala Gln Lys Ile Tyr Val Glu Met Lys
95 100 105

Phe Thr Leu Arg Asp Cys Asn Ser Ile Pro Trp Val Leu Gly Thr
110 115 120

Cys Lys Glu Thr Phe Asn Leu Phe Tyr Met Glu Ser Asp Glu Ser
125 130 135

His Gly Ile Lys Phe Lys Pro Asn Gln Tyr Thr Lys Ile Asp Thr
140 145 150

Ile Ala Ala Asp Glu Ser Phe Thr Gln Met Asp Leu Gly Asp Arg
155 160 165

Ile Leu Lys Leu Asn Thr Glu Ile Arg Glu Val Gly Pro Ile Glu
170 175 180

Arg Lys Gly Phe Tyr Leu Ala Phe Gln Asp Ile Gly Ala Cys Ile
185 190 195

Ala Leu Val Ser Val Arg Val Phe Tyr Lys Lys Cys Pro Phe Thr
200 205 210

Val Arg Asn Leu Ala Met Phe Pro Asp Thr Ile Pro Arg Val Asp
215 220 225

Ser Ser Ser Leu Val Glu Val Arg Gly Ser Cys Val Lys Ser Ala
230 235 240

Glu Glu Arg Asp Thr Pro Lys Leu Tyr Cys Gly Ala Asp Gly Asp
245 250 255

Trp	Leu	Val	Pro	Leu	Gly	Arg	Cys	Ile	Cys	Ser	Thr	Gly	Tyr	Glu
				260					265					270
Glu	Ile	Glu	Gly	Ser	Cys	His	Gly	Ala	Ser	Lys	Gly	Arg	Cys	Phe
				275					280					285

<210> 597
 <211> 2380
 <212> DNA
 <213> Homo Sapien

<400> 597
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Val	Leu	Pro	Asp	Phe	Leu	Gln	Gly	Arg	Ala	Pro	Gly	Ser	Tyr	Val
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Gly	Ala	Cys	Phe	Asp	Arg	Leu	Leu	His	Pro	Asp	Ala	Val	Pro	Ala
			620						625					630
Leu	Phe	Arg	Thr	Val	Pro	Val	Phe	Thr	Leu	Pro	Ser	Gln	Leu	Pro
			635						640					645
Asp	Phe	Leu	Gly	Ala	Leu	Gln	Gln	Pro	Arg	Ala	Pro	Arg	Ser	Gly
			650						655					660
Arg	Leu	Gln	Glu	Arg	Ala	Glu	Gln	Val	Ser	Arg	Ala	Leu	Gln	Pro
			665						670					675
Ala	Leu	Asp	Ser	Tyr	Phe	His	Pro	Pro	Gly	Thr	Pro	Ala	Pro	Gly
			680						685					690
Arg	Gly	Val	Gly	Pro	Gly	Ala	Gly	Pro	Gly	Ala	Gly	Asp	Gly	Thr
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<210> 599

<211> 1297

<212> DNA

<213> Homo Sapien

<400> 599

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<210> 600

<211> 246

<212> PRT

<213> Homo Sapien

<400> 600

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Leu	Leu	Leu	Leu	Ser	Gly	Trp	Ser	Arg	Ala	Gly	Arg	Ala	Asp	Pro	
				20					25					30	
His	Ser	Leu	Cys	Tyr	Asp	Ile	Thr	Val	Ile	Pro	Lys	Phe	Arg	Pro	
				35					40					45	
Gly	Pro	Arg	Trp	Cys	Ala	Val	Gln	Gly	Gln	Val	Asp	Glu	Lys	Thr	
				50					55					60	
Phe	Leu	His	Tyr	Asp	Cys	Gly	Asn	Lys	Thr	Val	Thr	Pro	Val	Ser	
				65					70					75	
Pro	Leu	Gly	Lys	Lys	Leu	Asn	Val	Thr	Thr	Ala	Trp	Lys	Ala	Gln	
				80					85					90	
Asn	Pro	Val	Leu	Arg	Glu	Val	Val	Asp	Ile	Leu	Thr	Glu	Gln	Leu	
				95					100					105	
Arg	Asp	Ile	Gln	Leu	Glu	Asn	Tyr	Thr	Pro	Lys	Glu	Pro	Leu	Thr	
				110					115					120	
Leu	Gln	Ala	Arg	Met	Ser	Cys	Glu	Gln	Lys	Ala	Glu	Gly	His	Ser	
				125					130					135	
Ser	Gly	Ser	Trp	Gln	Phe	Ser	Phe	Asp	Gly	Gln	Ile	Phe	Leu	Leu	
				140					145					150	
Phe	Asp	Ser	Glu	Lys	Arg	Met	Trp	Thr	Thr	Val	His	Pro	Gly	Ala	
				155					160					165	

Arg	Lys	Met	Lys	Glu	Lys	Trp	Glu	Asn	Asp	Lys	Val	Val	Ala	Met
				170					175					180
Ser	Phe	His	Tyr	Phe	Ser	Met	Gly	Asp	Cys	Ile	Gly	Trp	Leu	Glu
				185					190					195
Asp	Phe	Leu	Met	Gly	Met	Asp	Ser	Thr	Leu	Glu	Pro	Ser	Ala	Gly
				200					205					210
Ala	Pro	Leu	Ala	Met	Ser	Ser	Gly	Thr	Thr	Gln	Leu	Arg	Ala	Thr
				215					220					225
Ala	Thr	Thr	Leu	Ile	Leu	Cys	Cys	Leu	Leu	Ile	Ile	Leu	Pro	Cys
				230					235					240
Phe	Ile	Leu	Pro	Gly	Ile									
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<210> 601

<211> 1841

<212> DNA

<213> Homo Sapien

<400> 601

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<210> 604

<211> 247

<212> PRT

<213> Homo Sapien

<400> 604

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Leu	Gly	Ala	Leu	Ser	Gly	Trp	Ala	Ala	Ser	Asp	Asp	Pro	Ile	Glu
				20					25					30
Lys	Val	Ile	Glu	Gly	Ile	Asn	Arg	Gly	Leu	Ser	Asn	Ala	Glu	Arg
				35					40					45
Glu	Val	Gly	Lys	Ala	Leu	Asp	Gly	Ile	Asn	Ser	Gly	Ile	Thr	His
				50					55					60
Ala	Gly	Arg	Glu	Val	Glu	Lys	Val	Phe	Asn	Gly	Leu	Ser	Asn	Met
				65					70					75
Gly	Ser	His	Thr	Gly	Lys	Glu	Leu	Asp	Lys	Gly	Val	Gln	Gly	Leu
				80					85					90
Asn	His	Gly	Met	Asp	Lys	Val	Ala	His	Glu	Ile	Asn	His	Gly	Ile
				95					100					105

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 <211> 188
 <212> PRT
 <213> Homo Sapien

<400> 606
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 35 40 45
 Ala Thr Pro Ala Lys Asp Phe Gly Gly Ile Phe His Thr Arg Tyr
 50 55 60
 Glu Gln Ile His Leu Val Pro Ala Glu Pro Pro Glu Ala Cys Gly
 65 70 75
 Glu Leu Ser Asn Gly Phe Phe Ile Gln Asp Gln Ile Ala Leu Val
 80 85 90
 Glu Arg Gly Gly Cys Ser Phe Leu Ser Lys Thr Arg Val Val Gln
 95 100 105
 Glu His Gly Gly Arg Ala Val Ile Ile Ser Asp Asn Ala Val Asp
 110 115 120
 Asn Asp Ser Phe Tyr Val Glu Met Ile Gln Asp Ser Thr Gln Arg
 125 130 135
 Thr Ala Asp Ile Pro Ala Leu Phe Leu Leu Gly Arg Asp Gly Tyr
 140 145 150

Met Ile Arg Arg Ser Leu Glu Gln His Gly Leu Pro Trp Ala Ile
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<213> Homo Sapien

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<210> 610

<211> 261

<212> PRT

<213> Homo Sapien

<400> 610

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Thr Cys Trp Ala Leu Thr Ala Glu Pro Gly Trp Gly Gln Asn Lys
35 40 45

Gly Ala Thr Thr Cys Ala Thr Asn Ser His Ser Asp Ser Glu Leu
50 55 60

Arg Pro Glu Ile Phe Ser Ser Arg Glu Ala Trp Gln Phe Phe Leu
65 70 75

Leu Leu Trp Ser Pro Asp Phe Arg Pro Lys Met Lys Ala Ser Ser
80 85 90

Leu Ala Phe Ser Leu Leu Ser Ala Ala Phe Tyr Leu Leu Trp Thr
95 100 105

Pro Ser Thr Gly Leu Lys Thr Leu Asn Leu Gly Ser Cys Val Ile
110 115 120

Ala Thr Asn Leu Gln Glu Ile Arg Asn Gly Phe Ser Glu Ile Arg
125 130 135

Gly Ser Val Gln Ala Lys Asp Gly Asn Ile Asp Ile Arg Ile Leu
140 145 150

Arg Arg Thr Glu Ser Leu Gln Asp Thr Lys Pro Ala Asn Arg Cys
155 160 165

Cys Leu Leu Arg His Leu Leu Arg Leu Tyr Leu Asp Arg Val Phe
170 175 180

Lys Asn Tyr Gln Thr Pro Asp His Tyr Thr Leu Arg Lys Ile Ser
185 190 195

Ser Leu Ala Asn Ser Phe Leu Thr Ile Lys Lys Asp Leu Arg Leu
200 205 210

Ser His Ala His Met Thr Cys His Cys Gly Glu Glu Ala Met Lys
215 220 225

Lys Tyr Ser Gln Ile Leu Ser His Phe Glu Lys Leu Glu Pro Gln
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Trp Met Glu Glu Thr Glu
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- <211> 43
- <212> DNA
- <213> Artificial Sequence
- <220>
- <223> Synthetic oligonucleotide probe.

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<223> Synthetic oligonucleotide probe.

<400> 612

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Sequence